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THE THERMODYNAMIC PROPERTIES OF HELIUM FROM 3 TO 300° K BETWEEN 0.5 AND 100 ATMOSPHERES

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U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

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THE THERMODYNAMIC PROPERTIES OF HELIUM FROM 3 TO 300°K BETWEEN 0.5 AND 100 ATMOSPHERES

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ABSTRACT

The specific volume, enthalpy, entropy, and internal energy values of helium are presented in tabular form as functions of pressure and temperature.

Data are tabulated in one degree Kelvin increments for forty isobars between 0.5 atmospheres and 100 atmospheres. A comparison with previously published data is made where applicable.

An expression is presented which represents the pressure-density-temperature surface based on previously published data.

The tabulation is presented in the dimensional units of the metric system, but is also available in the dimensional units of the British system (Supplement A).

1. INTRODUCTION

Recent developments in the field of cryogenic engineering, such as the low temperature operation of masers and magnets, require increasingly accurate representations of the properties of the gases used as refrigerants. Helium, in particular, is used exclusively to provide continuous refrigeration in the temperature range 3.5° to 13°K, and is being considered as a prime refrigerant to temperature levels up to 40°K. Refrigeration methods are also becoming more complex and efficient, reflecting the advances in the design and construction of equipment such as heat exchangers and expansion machines. To determine the performance of these more advanced refrigeration systems, it is necessary to have available a continuous and consistent set of the thermodynamic properties of helium extending from 3°K to ambient temperatures.

These property data must necessarily reflect the most recent experimental measurements.

1.1 DATA CONSIDERED IN GENERATING THIS TABULATION

The work of Keesom [1942] assembled and in most cases correlated the property data reported by experimentalists up to and including 1941. Akin [1950], using the Beattie-Bridgeman equation of state and data derived from Keesom [1942], presented thermodynamic properties for helium to temperatures extending from 590°K down to about 12°K and to quite high gas densities.

Lounasmaa [1958] provided experimental data which indicated the virial form of the equation of state used by Keesom [1942] was somewhat inadequate in representing the properties for densities greater than the critical density at temperatures below 20°K. Mann and Stewart [1959] correlated these data of Lounasmaa [1958] with those of Keesom [1942], Berman and Mate [1958], and Domb and Dugdale [1957]. The results of this correlation were presented in graphical form for the temperature region 3° to 20°K.

The work of Edeskuty and Sherman [1958] provided experimental data at 4.2°K and below and up to densities in excess of three times the critical density.

The purpose of this work is to correlate the applicable data of these more recent investigators with those of Keesom [1942] to give a continuous representation of properties extending from 3°K to 300°K and pressures to 100 atmospheres.

2.0 SYMBOLS

The following is a list of symbols and definitions used in this report:

C_p^* - molar specific heat of helium gas at very low pressures. Assumed to be numerically equal to 5/2 R j/gm-mole-°K.

C_{sat} - specific heat of liquid helium at saturation conditions, - j/gm-mole-°K.

ρ - mass concentration (density) - gm-moles/liter.

H - enthalpy - j/gm-mole.

H_0 - enthalpy value of liquid helium at the conditions T = 0°K, P = zero.

H_L - enthalpy value at the conditions T = 4.2144°K (normal boiling point, T_{55E}), P = one atmosphere, saturated liquid.

P - absolute pressure - atmospheres.

S - entropy - j/gm-mole-°K.

S_0 - entropy of liquid helium at the conditions T = 0°K, and P = zero, assumed to be numerically equal to zero.

S_L - entropy value at the conditions T = 4.2144°K, (normal boiling point, T_{55E}), P = one atmosphere, saturated liquid.

T - temperature - degrees Kelvin.

U - internal energy - j/gm-mole.

V - molar volume - liters/gm-mole.

Z - compressibility factor $\equiv \frac{P}{\rho R T}$

3.0 CONSTANTS AND CONVERSION FACTORS

The temperature scale used in this report is that designated by the symbol T_{55E} [Clement, Logan and Gaffney, 1955] .

Constants and conversion factors are as follows:

One atmosphere	= $1.013250(10^6)$ dynes/cm^2.
R (gas constant)	= 8.20575×10^{-2} liter-atm/gm-mole-^{o}K. (chemical scale).
One calorie (thermochemical)	= 4.1840 Joules
One Joule (j)	= 9.86896×10^{-3} liter-atm.
One liter	= 1000.028 cm^3.

4.0 PRESSURE-DENSITY-TEMPERATURE SURFACE

The equation developed to describe the pressure-density-temperature surface is based on the equation of Benedict-Webb-Rubin [1940] , as modified for nitrogen by Strobridge [1962] and further modified here for helium. With pressure as the dependent variable, the equation is:

$$P = R\rho T + \left(R n_1 T + n_2 + \frac{n_3}{T} + \frac{n_4}{T^2} + \frac{n_5}{T^4} \right)\rho^2 + \left(R n_6 T + n_7 \right)\rho^3$$

$$+ n_8 \rho^4 + \left(\frac{n_9}{T^2} + \frac{n_{10}}{T^3} + \frac{n_{11}}{T^4} \right)\rho^3 \, e^{-n_{12}\rho^2/T}$$

$$+ \left(\frac{n_{13}}{T^2} + \frac{n_{14}}{T^3} + \frac{n_{15}}{T^4} \right)\rho^5 \, e^{-n_{12}\rho^2/T} + n_{16}\rho^5 + n_{17}\rho^6 \qquad (1)$$

Values for the constants are as follows:

$R = 0.820575 \quad (10^{-1})$

$n_1 = 0.1627693557(10^{-1})$

$n_2 = -0.3700903492(10^{-1})$

$n_3 = 0.7567259965(10^{-2})$

$n_4 = -0.1887566673(10^{-1})$

$n_5 = 0.4792344640(10^{-1})$

$n_6 = 0.1560344984(10^{-3})$

$n_7 = 0.9274298542(10^{-3})$

$n_8 = -0.2833997045(10^{-4})$

$n_9 = -0.5002871627(10^{-2})$

$n_{10} = 0.3451283837(10^{-1})$

$n_{11} = 0.1008924438(10^{0})$

$n_{12} = 0.65 \quad (10^{-2})$

$n_{13} = -0.1851562535(10^{-4})$

$n_{14} = 0.4204351888(10^{-4})$

$n_{15} = -0.1712445150(10^{-3})$

$n_{16} = 0.7739390202(10^{-6})$

$n_{17} = -0.2870693948(10^{-8})$

A least squares method developed by Jones [1962] and programmed for use on a digital computer was used to determine the values of these constants. Because the constant n_{12} appears in the exponential term, it was necessary to select several values for this constant and solve for the set of constants which gave the minimum in the sum of squares of deviations. The resulting best fit for the data was only slightly affected by changes in the value of the constant n_{12}, but it was found necessary to carry the maximum number of places in the derived constants to assure internal consistency and reproducibility.

Data used for the least squares treatment consisted of 695 pressure, density, and temperature points. These points were taken from the following published works:

Berman and Mate [1958]. Thirty-eight data points were used to describe the saturated vapor and saturated liquid conditions. Temperatures range from 2.2° to 5.18°K.

Edeskuty and Sherman [1958]. Eighty-eight data points were used to describe the compressed liquid region from 2.2° to 4.2°K. Pressures range from one to 140 atmospheres and the highest density values are in excess of three times the critical density.

Hill and Lounasmaa [1960]. A total of 258 experimental data points were used to describe the rather broad temperature and pressure region from about 2.5° to 20°K. Pressures range from one to 102

atmospheres with density values extending to three times the critical density.

Keesom [1942]. The virial equation of state and the values for the coefficients adopted by Keesom were used to obtain 311 pressure-density-temperature points along twenty-nine isotherms extending from 3.1 to 574°K. Pressure-density-temperature points having densities greater than the critical density were excluded because of the divergence of the equation of state values for pressure from the experimental values of Hill and Lounasmaa [1960] in the region of the 20°K isotherm.

Except for the two-phase region described by Berman and Mate [1958] overlapping of the data regions was extensive.

5.0 DERIVED FUNCTIONS

The property functions of enthalpy, entropy, and internal energy for the single phase fluid region were calculated using only the equation for the pressure-density-temperature surface (1). This procedure was necessary in the absence of specific heat measurements over the entire range of interest. Equations used to calculate these properties are shown below. For a complete derivation of the equations, the reader is referred to Beattie [1955].

$$H = H_0^o + \int_{T=0}^{T} C_p^* \, dT + (Z-1)\,RT + \int_0^{\rho} \left[\frac{P}{\rho^2} - \frac{T}{\rho^2}\left(\frac{\partial P}{\partial T}\right)_\rho \right] d\rho \quad (2)$$

$$S = S_0^o + \int_{T=0}^{T} \frac{C_p^*}{T} \, dT - R\ell n\frac{P}{Z} + \int_0^{\rho} \left[\frac{R}{\rho} - \frac{1}{\rho^2}\left(\frac{\partial P}{\partial T}\right)_\rho \right] d\rho \quad (3)$$

$$U = H - \frac{P}{\rho}. \quad (4)$$

For the particular case of helium:

$$H_0^o = (H_L - H_0) + L_v - \left[(Z-1)\,RT + \int_0^{\rho} \left[\frac{P}{\rho^2} - \frac{T}{\rho^2}\left(\frac{\partial P}{\partial T}\right)_\rho \right] d\rho \right], \quad (5)$$

$$S_0^o = (S_L - S_0) + \frac{L_v}{T} - \left[-R\ell n \frac{P}{Z} + \int_0^{\rho} \left[\frac{R}{\rho} - \frac{1}{\rho^2} \left(\frac{\partial P}{\partial T} \right)_{\rho} \right] d\rho \right]. \qquad (6)$$

Equations (5) and (6) are evaluated at the normal boiling point temperature of 4.2144°K and the density of saturated vapor at this temperature. L_v is the heat of vaporization at this temperature, based on Berman and Mate [1958]. The calculations indicated by (5) and (6) result in values for S_0^o and H_0^o of 9.2609 j/gm-mole °K and 36.5582 j/gm-mole respectively.

The values of enthalpy, entropy, and internal energy of the saturated liquid given in Table I were taken from Mann and Stewart [1959]. These values were found by graphically integrating the expressions:

$$H - H_0 = \int_{T=0}^{T} C_{sat}\, dT + \int_{P=0}^{P} \frac{dP}{\rho}, \qquad (7)$$

$$S - S_0 = \int_{T=0}^{T} \frac{C_{sat}}{T}\, dT. \qquad (8)$$

The specific heat of saturated liquid (C_{sat}) was taken from Hill and Lounasmaa [1957].

Properties at the saturated vapor condition given in Table I were found using (7) and (8) and the heat of vaporization data of Berman and Mate [1958].

Values for internal energy were computed from (4).

Equation (1) was developed starting with the work of Lounasmaa [1959]. This publication presented the derived constants for the Benedict-Webb-Rubin equation of state using the data obtained experimentally by Hill and Lounasmaa [1960]. As the data range was extended to include the region defined by this report, the Benedict-Webb-Rubin equation was also modified as necessary. The temperature-pressure region 4.8° to 5.8°K and 1.8 to 2.8 atmospheres was less accurately reproduced as this modification proceeded to the form

TABLE 1

Properties of Helium

Two Phase Liquid-Vapor Region

Temperature °K	Pressure Atmospheres	Saturated Vapor v cc/gm	h j/gm	u j/gm	s j/gm-°K	Saturated Liquid v cc/gm	h j/gm	u j/gm	s j/gm-°K
3.00	0.241	224.11	28.96	23.49	10.247	7.0852	5.30	5.13	2.356
3.20	0.320	174.83	29.48	23.81	9.911	7.1849	5.85	5.62	2.527
3.40	0.416	138.70	29.93	24.08	9.606	7.3025	6.47	6.16	2.690
3.60	0.529	111.48	30.34	24.36	9.322	7.4388	7.18	6.78	2.883
3.80	0.661	90.50	30.59	24.53	9.021	7.5965	7.93	7.40	3.059
4.00	0.814	73.86	30.72	24.63	8.736	7.7785	8.81	8.17	3.255
4.20	0.990	60.61	30.79	24.71	8.443	7.9885	9.85	9.05	3.460
4.40	1.190	49.80	30.65	24.65	8.150	8.2305	10.96	9.97	3.674
4.60	1.417	40.72	30.32	24.47	7.845	8.5470	12.33	11.10	3.920
4.80	1.672	32.87	29.49	23.92	7.473	9.0334	13.88	12.35	4.188
5.00	1.959	25.67	28.02	22.92	7.000	9.9404	16.00	14.03	4.598

of (1). The reason for this decrease in accuracy was the inability of the developed equation to represent exactly the form of the critical isotherm at or near the critical pressure.

The effect of this problem was two-fold. Properties defined by (1), (2), (3), and (4) in this temperature and pressure region were found to have substantial errors. In addition, the integration, indicated by (2) and (3), for the values of derived properties at densities greater than the critical density and at pressures greater than 2.8 atmospheres resulted in substantial errors at temperatures near the critical point.

To eliminate these errors, the properties were derived using (1), (2), (3), and (4) for temperatures of 6°K and above for densities greater than critical density and for temperatures approaching the saturated vapor conditions at densities less than the critical density.

Equations (2) and (3) were then modified so as to substitute for the lower limit of integration the values for the properties along the saturated liquid region. Equations (9) and (10) indicate this modification and with (4) are the equations used to derive properties at pressures greater than the critical pressure and at temperatures less than 6°K.

$$\Delta S = \int_{\rho_{sat}}^{\rho} \left[-\frac{1}{\rho^2} \left(\frac{\partial P}{\partial T} \right)_{\rho} \right]_T d\rho \qquad (9)$$

$$\Delta H = \frac{P}{\rho} - \left(\frac{P}{\rho_{sat}} \right) + \int_{\rho_{sat}}^{\rho} \left[\frac{P}{\rho^2} - \frac{T}{\rho^2} \left(\frac{\partial P}{\partial T} \right)_{\rho} \right]_T d\rho \qquad (10)$$

Isobars were then plotted graphically on temperature-entropy and temperature-enthalpy coordinates. The entropy change along the isochore 30.93 gm-mole/liter was computed from 4.75° to 10°K using the specific heat data of Hill and Lounasmaa [1960] and the expression:

$$\Delta S = \int_{T_1}^{T_2} \frac{Cv}{T} \, dT . \qquad (11)$$

The intersections of the isobars with this isochore given by Hill and Lounasmaa [1960] were noted as the temperature was increased.

A correction for the properties along the 5° and 6°K isotherms was determined and the tabulated data were adjusted to be consistent with the above-described specific heat data of Hill and Lounasmaa [1960]. In addition, the two-atmosphere isobar was plotted from Hill and Lounasmaa [1960] in the region of the critical values and the tabulated properties obtained directly from this plot.

6.0 TABULATED THERMODYNAMIC PROPERTIES

Values taken from the pressure-density-temperature surface described by (1) and the derived properties found from (2) through (11) are listed as functions of pressure and temperature on succeeding pages. Forty isobars are presented covering the range 0.5 to 100 atmospheres. One degree increments of temperature are given except at the two-phase boundaries, and, in general, extend from 3° to 300°K. Values listed in the tables are specific not molar quantities The molecular weight of helium was taken as 4.0028.

It was found that a better representation of the pressure-density-temperature surface could be achieved by considering a number of restricted ranges of temperature and pressure when defining the constants of (1), but this procedure would then require the fitting and smoothing of several property surfaces. It was felt that the surface matching would not increase the accuracy of the tabulated values over the entire range of interest by a factor that could justify the extensive data manipulation required.

7.0 DISCUSSION

The pressure-density-temperature surface described by (1) and the tabulated derived functions fit the original data to varying degrees of accuracy depending on the temperature and pressure region considered. In general, the ability of (1) to reproduce the original data is less accurate in the regions of phase change, and in particular, in the region of the critical point. As mentioned above, the liquid-vapor region was handled graphically in an attempt to reduce the error in this region.

In the temperature region 10° to 300°K the accuracy of the tabulated values of pressure, density, enthalpy, and entropy is estimated to be within 3% while internal energy values may vary somewhat more.

Below 10°K and at low pressures the properties of enthalpy, entropy, internal energy, and pressure are accurate to an estimated error of 3% while density may have an uncertainty of as much as 5%. At higher pressures the density is defined to within the estimated 3% but the pressures may be in error as much as 5%.

Values for the specific heats of helium derived from the tables are estimated to be within 5% in the temperature range 10 to 300°K. It is not recommended that specific heats be extracted from the tables at temperature levels below 10°K.

Figure 1 summarizes the deviations in enthalpy when the values of this paper are compared with enthalpy values of previously published works.

$$\text{Deviation (\%)} = 100\,(\text{Obs.} - \text{Calc.})/(\text{Obs.})$$

The number of places carried in the tables is not a reflection of the estimated accuracy but is necessary to provide internal consistency during the calculation of refrigeration systems.

Tabulated values of the properties are presented in the dimensional units of the metric system. Values in the units of the British system are available as Supplement A to this report [Mann 1962].

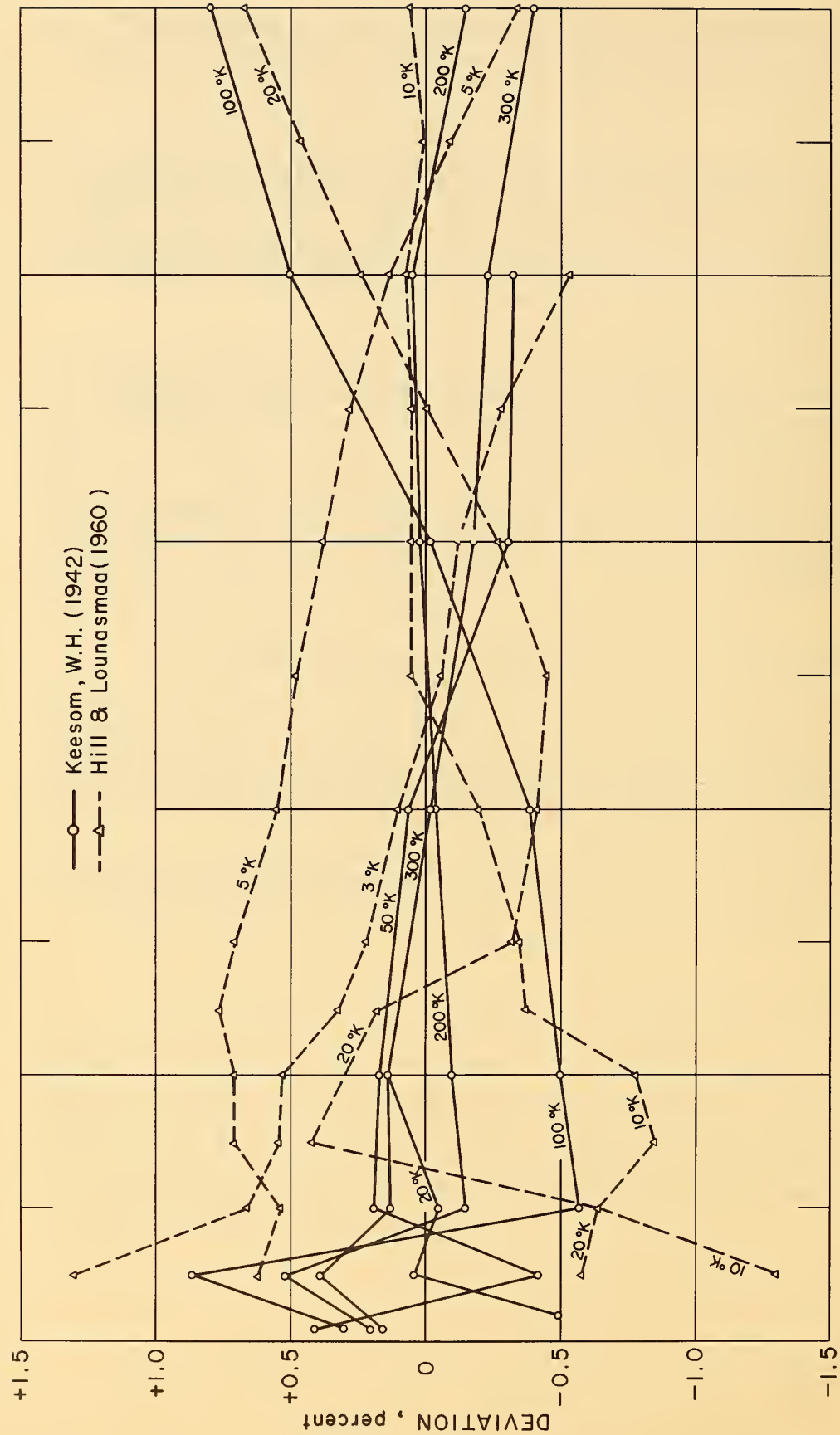

Figure 1. Enthalpy Deviation Plot

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TABLE 2

Tabulation of Thermodynamic Properties

.50 ATMOSPHERE ISOBAR

	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
	3.00	7.06	5.45	5.09	2.342
*	3.555	7.41	6.99	6.61	2.842
*	3.555	117.60	30.22	24.26	9.376
	4.00	140.05	32.88	25.79	10.121
	5.00	186.31	38.62	29.18	11.389
	6.00	231.40	44.13	32.41	12.379
	7.00	275.20	49.61	35.67	13.224
	8.00	318.25	55.01	38.89	13.945
	9.00	360.81	60.37	42.09	14.576
	10.00	403.05	65.69	45.27	15.136
	11.00	445.06	70.98	48.43	15.641
	12.00	486.89	76.26	51.59	16.100
	13.00	528.59	81.52	54.74	16.522
	14.00	570.19	86.78	57.89	16.911
	15.00	611.71	92.02	61.03	17.273
	16.00	653.17	97.26	64.17	17.611
	17.00	694.57	102.49	67.30	17.928
	18.00	735.93	107.72	70.44	18.227
	19.00	777.25	112.95	73.57	18.509
	20.00	818.54	118.17	76.70	18.777
	21.00	859.80	123.39	79.83	19.032
	22.00	901.03	128.60	82.95	19.275
	23.00	942.25	133.82	86.08	19.506
	24.00	983.45	139.03	89.20	19.728
	25.00	1024.63	144.24	92.33	19.941
	26.00	1065.80	149.45	95.45	20.145
	27.00	1106.96	154.66	98.58	20.342
	28.00	1148.10	159.87	101.70	20.531
	29.00	1189.24	165.07	104.82	20.714
	30.00	1230.36	170.28	107.94	20.890
	31.00	1271.48	175.48	111.06	21.061
	32.00	1312.59	180.68	114.18	21.226
	33.00	1353.70	185.89	117.30	21.386
	34.00	1394.79	191.09	120.42	21.542
	35.00	1435.89	196.29	123.54	21.692
	36.00	1476.97	201.49	126.66	21.839
	37.00	1518.06	206.69	129.78	21.981
	38.00	1559.14	211.89	132.90	22.120
	39.00	1600.21	217.09	136.02	22.255
	40.00	1641.28	222.29	139.14	22.387
	41.00	1682.35	227.49	142.26	22.515
	42.00	1723.41	232.69	145.38	22.640
	43.00	1764.47	237.89	148.49	22.763
	44.00	1805.53	243.09	151.61	22.882
	45.00	1846.59	248.29	154.73	22.999
	46.00	1887.64	253.48	157.85	23.113
	47.00	1928.69	258.68	160.97	23.225
	48.00	1969.74	263.88	164.08	23.335
	49.00	2010.79	269.08	167.20	23.442
	50.00	2051.83	274.27	170.32	23.547
	51.00	2092.88	279.47	173.44	23.650
	52.00	2133.92	284.67	176.55	23.750
	53.00	2174.96	289.86	179.67	23.849
	54.00	2216.00	295.06	182.79	23.947
	55.00	2257.04	300.25	185.90	24.042
	56.00	2298.07	305.45	189.02	24.136
	57.00	2339.11	310.65	192.14	24.228
	58.00	2380.14	315.84	195.26	24.318
	59.00	2421.17	321.04	198.37	24.407
	60.00	2462.20	326.23	201.49	24.494
	61.00	2503.23	331.43	204.61	24.580
	62.00	2544.26	336.62	207.72	24.664
	63.00	2585.29	341.82	210.84	24.748
	64.00	2626.32	347.01	213.96	24.829
	65.00	2667.35	352.21	217.07	24.910
	66.00	2708.37	357.40	220.19	24.989
	67.00	2749.40	362.60	223.30	25.067
	68.00	2790.42	367.79	226.42	25.144
	69.00	2831.45	372.99	229.54	25.220
	70.00	2872.47	378.18	232.65	25.295
	71.00	2913.49	383.38	235.77	25.369
	72.00	2954.51	388.57	238.89	25.441
	73.00	2995.54	393.77	242.00	25.513
	74.00	3036.56	398.96	245.12	25.584
	75.00	3077.58	404.16	248.23	25.653
	76.00	3118.60	409.35	251.35	25.722
	77.00	3159.61	414.54	254.47	25.790
	78.00	3200.63	419.74	257.58	25.857
	79.00	3241.65	424.93	260.70	25.923
	80.00	3282.67	430.13	263.81	25.988
	81.00	3323.69	435.32	266.93	26.053
	82.00	3364.70	440.52	270.05	26.117
	83.00	3405.72	445.71	273.16	26.180
	84.00	3446.74	450.90	276.28	26.242
	85.00	3487.75	456.10	279.39	26.303
	86.00	3528.77	461.29	282.51	26.364
	87.00	3569.78	466.49	285.63	26.424
	88.00	3610.80	471.68	288.74	26.483
	89.00	3651.81	476.87	291.86	26.542
	90.00	3692.82	482.07	294.97	26.600
	91.00	3733.84	487.26	298.09	26.658
	92.00	3774.85	492.45	301.21	26.714
	93.00	3815.86	497.65	304.32	26.771
	94.00	3856.88	502.84	307.44	26.826
	95.00	3897.89	508.03	310.55	26.881
	96.00	3938.90	513.23	313.67	26.935
	97.00	3979.91	518.42	316.78	26.989
	98.00	4020.93	523.62	319.90	27.042
	99.00	4061.94	528.81	323.02	27.095
	100.00	4102.95	534.00	326.13	27.147
	101.00	4143.96	539.20	329.25	27.199
	102.00	4184.97	544.39	332.36	27.250
	103.00	4225.98	549.58	335.48	27.301
	104.00	4266.99	554.78	338.59	27.351
	105.00	4308.00	559.97	341.71	27.401
	106.00	4349.01	565.16	344.83	27.450
	107.00	4390.02	570.36	347.94	27.499
	108.00	4431.03	575.55	351.06	27.547
	109.00	4472.04	580.74	354.17	27.595
	110.00	4513.05	585.94	357.29	27.642
	111.00	4554.06	591.13	360.40	27.689
	112.00	4595.07	596.32	363.52	27.736
	113.00	4636.08	601.52	366.63	27.782
	114.00	4677.09	606.71	369.75	27.828
	115.00	4718.10	611.90	372.87	27.873
	116.00	4759.10	617.10	375.98	27.918
	117.00	4800.11	622.29	379.10	27.963
	118.00	4841.12	627.48	382.21	28.007
	119.00	4882.13	632.68	385.33	28.051
	120.00	4923.14	637.87	388.44	28.094
	121.00	4964.14	643.06	391.56	28.137
	122.00	5005.15	648.25	394.67	28.180
	123.00	5046.16	653.45	397.79	28.222
	124.00	5087.17	658.64	400.91	28.265
	125.00	5128.17	663.83	404.02	28.306
	126.00	5169.18	669.03	407.14	28.348
	127.00	5210.19	674.22	410.25	28.389
	128.00	5251.19	679.41	413.37	28.429
	129.00	5292.20	684.61	416.48	28.470
	130.00	5333.21	689.80	419.60	28.510
	131.00	5374.22	694.99	422.71	28.550
	132.00	5415.22	700.18	425.83	28.589
	133.00	5456.23	705.38	428.94	28.628
	134.00	5497.23	710.57	432.06	28.667
	135.00	5538.24	715.76	435.18	28.706
	136.00	5579.25	720.96	438.29	28.744
	137.00	5620.25	726.15	441.41	28.782
	138.00	5661.26	731.34	444.52	28.820
	139.00	5702.26	736.54	447.64	28.858
	140.00	5743.27	741.73	450.75	28.895

* PHASE CHANGE

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	5784.28	746.92	453.87	28.932	221.00	9064.57	1162.34	703.09	31.265
142.00	5825.28	752.11	456.98	28.968	222.00	9105.57	1167.53	706.21	31.289
143.00	5866.29	757.31	460.10	29.005	223.00	9146.57	1172.72	709.32	31.312
144.00	5907.29	762.50	463.21	29.041	224.00	9187.57	1177.92	712.44	31.335
145.00	5948.30	767.69	466.33	29.077	225.00	9228.58	1183.11	715.55	31.358
146.00	5989.30	772.89	469.44	29.113	226.00	9269.58	1188.30	718.67	31.382
147.00	6030.31	778.08	472.56	29.148	227.00	9310.58	1193.49	721.78	31.404
148.00	6071.31	783.27	475.68	29.183	228.00	9351.58	1198.69	724.90	31.427
149.00	6112.32	788.46	478.79	29.218	229.00	9392.59	1203.88	728.01	31.450
150.00	6153.32	793.66	481.91	29.253	230.00	9433.59	1209.07	731.13	31.473
151.00	6194.33	798.85	485.02	29.288	231.00	9474.59	1214.26	734.24	31.495
152.00	6235.33	804.04	488.14	29.322	232.00	9515.59	1219.46	737.36	31.518
153.00	6276.34	809.24	491.25	29.356	233.00	9556.59	1224.65	740.48	31.540
154.00	6317.34	814.43	494.37	29.390	234.00	9597.60	1229.84	743.59	31.562
155.00	6358.35	819.62	497.48	29.423	235.00	9638.60	1235.03	746.71	31.584
156.00	6399.35	824.81	500.60	29.457	236.00	9679.60	1240.23	749.82	31.606
157.00	6440.36	830.01	503.71	29.490	237.00	9720.60	1245.42	752.94	31.628
158.00	6481.36	835.20	506.83	29.523	238.00	9761.61	1250.61	756.05	31.650
159.00	6522.37	840.39	509.94	29.556	239.00	9802.61	1255.80	759.17	31.672
160.00	6563.37	845.59	513.06	29.588	240.00	9843.61	1261.00	762.28	31.694
161.00	6604.38	850.78	516.18	29.621	241.00	9884.61	1266.19	765.40	31.715
162.00	6645.38	855.97	519.29	29.653	242.00	9925.61	1271.38	768.51	31.737
163.00	6686.38	861.16	522.41	29.685	243.00	9966.62	1276.57	771.63	31.758
164.00	6727.39	866.36	525.52	29.716	244.00	10007.62	1281.77	774.74	31.779
165.00	6768.39	871.55	528.64	29.748	245.00	10048.62	1286.96	777.86	31.801
166.00	6809.40	876.74	531.75	29.779	246.00	10089.62	1292.15	780.97	31.822
167.00	6850.40	881.93	534.87	29.811	247.00	10130.62	1297.34	784.09	31.843
168.00	6891.41	887.13	537.98	29.842	248.00	10171.62	1302.54	787.20	31.864
169.00	6932.41	892.32	541.10	29.872	249.00	10212.63	1307.73	790.32	31.885
170.00	6973.41	897.51	544.21	29.903	250.00	10253.63	1312.92	793.43	31.906
171.00	7014.42	902.71	547.33	29.933	251.00	10294.63	1318.11	796.55	31.926
172.00	7055.42	907.90	550.44	29.964	252.00	10335.63	1323.31	799.66	31.947
173.00	7096.42	913.09	553.56	29.994	253.00	10376.63	1328.50	802.78	31.968
174.00	7137.43	918.28	556.67	30.024	254.00	10417.64	1333.69	805.89	31.988
175.00	7178.43	923.48	559.79	30.054	255.00	10458.64	1338.88	809.01	32.008
176.00	7219.44	928.67	562.91	30.083	256.00	10499.64	1344.08	812.13	32.029
177.00	7260.44	933.86	566.02	30.113	257.00	10540.64	1349.27	815.24	32.049
178.00	7301.44	939.05	569.14	30.142	258.00	10581.64	1354.46	818.36	32.069
179.00	7342.45	944.25	572.25	30.171	259.00	10622.64	1359.65	821.47	32.089
180.00	7383.45	949.44	575.37	30.200	260.00	10663.65	1364.85	824.59	32.109
181.00	7424.45	954.63	578.48	30.229	261.00	10704.65	1370.04	827.70	32.129
182.00	7465.46	959.83	581.60	30.257	262.00	10745.65	1375.23	830.82	32.149
183.00	7506.46	965.02	584.71	30.286	263.00	10786.65	1380.42	833.93	32.169
184.00	7547.46	970.21	587.83	30.314	264.00	10827.65	1385.62	837.05	32.189
185.00	7588.47	975.40	590.94	30.342	265.00	10868.65	1390.81	840.16	32.208
186.00	7629.47	980.60	594.06	30.370	266.00	10909.66	1396.00	843.28	32.228
187.00	7670.47	985.79	597.17	30.398	267.00	10950.66	1401.19	846.39	32.247
188.00	7711.48	990.98	600.29	30.426	268.00	10991.66	1406.39	849.51	32.267
189.00	7752.48	996.17	603.40	30.453	269.00	11032.66	1411.58	852.62	32.286
190.00	7793.48	1001.37	606.52	30.481	270.00	11073.66	1416.77	855.74	32.305
191.00	7834.49	1006.56	609.63	30.508	271.00	11114.66	1421.96	858.85	32.324
192.00	7875.49	1011.75	612.75	30.535	272.00	11155.67	1427.16	861.97	32.344
193.00	7916.49	1016.95	615.87	30.562	273.00	11196.67	1432.35	865.08	32.363
194.00	7957.50	1022.14	618.98	30.589	274.00	11237.67	1437.54	868.20	32.382
195.00	7998.50	1027.33	622.10	30.615	275.00	11278.67	1442.73	871.31	32.400
196.00	8039.50	1032.52	625.21	30.642	276.00	11319.67	1447.93	874.43	32.419
197.00	8080.50	1037.72	628.33	30.668	277.00	11360.67	1453.12	877.54	32.438
198.00	8121.51	1042.91	631.44	30.695	278.00	11401.68	1458.31	880.66	32.457
199.00	8162.51	1048.10	634.56	30.721	279.00	11442.68	1463.50	883.77	32.475
200.00	8203.51	1053.29	637.67	30.747	280.00	11483.68	1468.70	886.89	32.494
201.00	8244.52	1058.49	640.79	30.773	281.00	11524.68	1473.89	890.01	32.513
202.00	8285.52	1063.68	643.90	30.799	282.00	11565.68	1479.08	893.12	32.531
203.00	8326.52	1068.87	647.02	30.824	283.00	11606.68	1484.27	896.24	32.549
204.00	8367.52	1074.06	650.13	30.850	284.00	11647.68	1489.47	899.35	32.568
205.00	8408.53	1079.26	653.25	30.875	285.00	11688.69	1494.66	902.47	32.586
206.00	8449.53	1084.45	656.36	30.900	286.00	11729.69	1499.85	905.58	32.604
207.00	8490.53	1089.64	659.48	30.926	287.00	11770.69	1505.04	908.70	32.622
208.00	8531.54	1094.83	662.59	30.951	288.00	11811.69	1510.24	911.81	32.640
209.00	8572.54	1100.03	665.71	30.975	289.00	11852.69	1515.43	914.93	32.658
210.00	8613.54	1105.22	668.82	31.000	290.00	11893.69	1520.62	918.04	32.676
211.00	8654.54	1110.41	671.94	31.025	291.00	11934.69	1525.81	921.16	32.694
212.00	8695.55	1115.60	675.05	31.049	292.00	11975.70	1531.01	924.27	32.712
213.00	8736.55	1120.80	678.17	31.074	293.00	12016.70	1536.20	927.39	32.730
214.00	8777.55	1125.99	681.29	31.098	294.00	12057.70	1541.39	930.50	32.747
215.00	8818.55	1131.18	684.40	31.122	295.00	12098.70	1546.58	933.62	32.765
216.00	8859.56	1136.38	687.52	31.147	296.00	12139.70	1551.78	936.73	32.783
217.00	8900.56	1141.57	690.63	31.171	297.00	12180.70	1556.97	939.85	32.800
218.00	8941.56	1146.76	693.75	31.194	298.00	12221.70	1562.16	942.96	32.818
219.00	8982.56	1151.95	696.86	31.218	299.00	12262.70	1567.35	946.08	32.835
220.00	9023.57	1157.15	699.98	31.242	300.00	12303.71	1572.55	949.19	32.852

1.00 ATMOSPHERE 1S08AR

	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
	3.00	6.99	5.74	5.02	2.318
	4.00	7.70	8.87	8.09	3.234
*	4.214	8.01	9.98	9.17	3.473
*	4.214	59.83	30.88	24.82	8.432
	5.00	82.88	36.24	27.84	9.609
	6.00	108.09	42.32	31.37	10.762
	7.00	131.63	48.15	34.81	11.661
	8.00	154.27	53.79	38.16	12.414
	9.00	176.38	59.32	41.45	13.065
	10.00	198.13	64.77	44.70	13.640
	11.00	219.64	70.17	47.92	14.155
	12.00	240.98	75.54	51.12	14.622
	13.00	262.18	80.88	54.31	15.049
	14.00	283.27	86.19	57.49	15.443
	15.00	304.29	91.49	60.66	15.808
	16.00	325.24	96.77	63.82	16.150
	17.00	346.14	102.05	66.98	16.469
	18.00	366.99	107.31	70.13	16.770
	19.00	387.80	112.57	73.27	17.054
	20.00	408.59	117.82	76.42	17.324
	21.00	429.34	123.07	79.56	17.580
	22.00	450.08	128.31	82.70	17.823
	23.00	470.79	133.54	85.84	18.056
	24.00	491.49	138.77	88.97	18.279
	25.00	512.17	144.00	92.11	18.492
	26.00	532.83	149.23	95.24	18.697
	27.00	553.49	154.45	98.37	18.894
	28.00	574.13	159.67	101.50	19.084
	29.00	594.76	164.89	104.63	19.267
	30.00	615.39	170.11	107.76	19.444
	31.00	636.00	175.33	110.88	19.615
	32.00	656.61	180.54	114.01	19.781
	33.00	677.22	185.76	117.13	19.941
	34.00	697.81	190.97	120.26	20.097
	35.00	718.41	196.18	123.38	20.248
	36.00	738.99	201.39	126.51	20.395
	37.00	759.57	206.60	129.63	20.537
	38.00	780.15	211.81	132.75	20.676
	39.00	800.73	217.01	135.88	20.812
	40.00	821.30	222.22	139.00	20.943
	41.00	841.86	227.43	142.12	21.072
	42.00	862.43	232.63	145.24	21.197
	43.00	882.99	237.84	148.36	21.320
	44.00	903.54	243.04	151.49	21.440
	45.00	924.10	248.24	154.61	21.556
	46.00	944.65	253.45	157.73	21.671
	47.00	965.20	258.65	160.85	21.783
	48.00	985.75	263.85	163.97	21.892
	49.00	1006.30	269.05	167.09	22.000
	50.00	1026.84	274.25	170.21	22.105
	51.00	1047.39	279.45	173.33	22.208
	52.00	1067.93	284.66	176.45	22.309
	53.00	1088.47	289.86	179.56	22.408
	54.00	1109.01	295.06	182.68	22.505
	55.00	1129.54	300.26	185.80	22.600
	56.00	1150.08	305.46	188.92	22.694
	57.00	1170.61	310.66	192.04	22.786
	58.00	1191.15	315.85	195.16	22.876
	59.00	1211.68	321.05	198.28	22.965
	60.00	1232.21	326.25	201.39	23.053
	61.00	1252.74	331.45	204.51	23.139
	62.00	1273.27	336.65	207.63	23.223
	63.00	1293.80	341.85	210.75	23.306
	64.00	1314.32	347.04	213.87	23.388
	65.00	1334.85	352.24	216.98	23.469
	66.00	1355.38	357.44	220.10	23.548
	67.00	1375.90	362.64	223.22	23.626
	68.00	1396.43	367.83	226.34	23.703
	69.00	1416.95	373.03	229.46	23.779
	70.00	1437.47	378.23	232.57	23.854
	71.00	1457.99	383.43	235.69	23.928
	72.00	1478.52	388.62	238.81	24.000
	73.00	1499.04	393.82	241.92	24.072
	74.00	1519.56	399.02	245.04	24.143
	75.00	1540.08	404.21	248.16	24.212
	76.00	1560.60	409.41	251.28	24.281
	77.00	1581.12	414.60	254.39	24.349
	78.00	1601.63	419.80	257.51	24.416
	79.00	1622.15	425.00	260.63	24.482
	80.00	1642.67	430.19	263.74	24.548
	81.00	1663.19	435.39	266.86	24.612
	82.00	1683.70	440.58	269.98	24.676
	83.00	1704.22	445.78	273.09	24.739
	84.00	1724.74	450.97	276.21	24.801
	85.00	1745.25	456.17	279.33	24.863
	86.00	1765.77	461.37	282.44	24.924
	87.00	1786.28	466.56	285.56	24.984
	88.00	1806.80	471.76	288.68	25.043
	89.00	1827.31	476.95	291.79	25.102
	90.00	1847.82	482.15	294.91	25.160
	91.00	1868.34	487.34	298.03	25.217
	92.00	1888.85	492.54	301.14	25.274
	93.00	1909.36	497.73	304.26	25.330
	94.00	1929.88	502.93	307.38	25.386
	95.00	1950.39	508.12	310.49	25.441
	96.00	1970.90	513.32	313.61	25.495
	97.00	1991.41	518.51	316.73	25.549
	98.00	2011.93	523.71	319.84	25.602
	99.00	2032.44	528.90	322.96	25.655
	100.00	2052.95	534.10	326.07	25.707
	101.00	2073.46	539.29	329.19	25.759
	102.00	2093.97	544.48	332.31	25.810
	103.00	2114.48	549.68	335.42	25.861
	104.00	2134.99	554.87	338.54	25.911
	105.00	2155.50	560.07	341.66	25.960
	106.00	2176.01	565.26	344.77	26.010
	107.00	2196.52	570.46	347.89	26.058
	108.00	2217.03	575.65	351.00	26.107
	109.00	2237.54	580.84	354.12	26.155
	110.00	2258.05	586.04	357.24	26.202
	111.00	2278.56	591.23	360.35	26.249
	112.00	2299.07	596.43	363.47	26.296
	113.00	2319.58	601.62	366.58	26.342
	114.00	2340.09	606.82	369.70	26.388
	115.00	2360.59	612.01	372.82	26.433
	116.00	2381.10	617.20	375.93	26.478
	117.00	2401.61	622.40	379.05	26.523
	118.00	2422.12	627.59	382.16	26.567
	119.00	2442.63	632.79	385.28	26.611
	120.00	2463.13	637.98	388.40	26.654
	121.00	2483.64	643.17	391.51	26.697
	122.00	2504.15	648.37	394.63	26.740
	123.00	2524.66	653.56	397.74	26.782
	124.00	2545.16	658.76	400.86	26.824
	125.00	2565.67	663.95	403.98	26.866
	126.00	2586.18	669.14	407.09	26.907
	127.00	2606.69	674.34	410.21	26.949
	128.00	2627.19	679.53	413.32	26.989
	129.00	2647.70	684.72	416.44	27.030
	130.00	2668.21	689.92	419.55	27.070
	131.00	2688.71	695.11	422.67	27.110
	132.00	2709.22	700.30	425.79	27.149
	133.00	2729.73	705.50	428.90	27.188
	134.00	2750.23	710.69	432.02	27.227
	135.00	2770.74	715.89	435.13	27.266
	136.00	2791.24	721.08	438.25	27.304
	137.00	2811.75	726.27	441.36	27.342
	138.00	2832.26	731.47	444.48	27.380
	139.00	2852.76	736.66	447.60	27.417
	140.00	2873.27	741.85	450.71	27.455

* PHASE CHANGE

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	2893.77	747.05	453.83	27.492	221.00	4534.06	1162.49	703.07	29.825
142.00	2914.28	752.24	456.94	27.528	222.00	4554.56	1167.69	706.18	29.849
143.00	2934.78	757.43	460.06	27.565	223.00	4575.07	1172.88	709.30	29.872
144.00	2955.29	762.63	463.17	27.601	224.00	4595.57	1178.07	712.41	29.895
145.00	2975.80	767.82	466.29	27.637	225.00	4616.07	1183.26	715.53	29.919
146.00	2996.30	773.01	469.41	27.673	226.00	4636.57	1188.46	718.64	29.942
147.00	3016.81	778.21	472.52	27.708	227.00	4657.08	1193.65	721.76	29.965
148.00	3037.31	783.40	475.64	27.743	228.00	4677.58	1198.84	724.87	29.987
149.00	3057.82	788.59	478.75	27.778	229.00	4698.08	1204.03	727.99	30.010
150.00	3078.32	793.79	481.87	27.813	230.00	4718.58	1209.23	731.10	30.033
151.00	3098.83	798.98	484.98	27.847	231.00	4739.08	1214.42	734.22	30.055
152.00	3119.33	804.17	488.10	27.882	232.00	4759.59	1219.61	737.34	30.078
153.00	3139.84	809.37	491.22	27.916	233.00	4780.09	1224.81	740.45	30.100
154.00	3160.34	814.56	494.33	27.950	234.00	4800.59	1230.00	743.57	30.122
155.00	3180.85	819.75	497.45	27.983	235.00	4821.09	1235.19	746.68	30.144
156.00	3201.35	824.95	500.56	28.017	236.00	4841.60	1240.38	749.80	30.166
157.00	3221.85	830.14	503.68	28.050	237.00	4862.10	1245.58	752.91	30.188
158.00	3242.36	835.33	506.79	28.083	238.00	4882.60	1250.77	756.03	30.210
159.00	3262.86	840.53	509.91	28.116	239.00	4903.10	1255.96	759.14	30.232
160.00	3283.37	845.72	513.02	28.148	240.00	4923.60	1261.16	762.26	30.254
161.00	3303.87	850.91	516.14	28.180	241.00	4944.11	1266.35	765.37	30.275
162.00	3324.38	856.11	519.26	28.213	242.00	4964.61	1271.54	768.49	30.297
163.00	3344.88	861.30	522.37	28.245	243.00	4985.11	1276.73	771.60	30.318
164.00	3365.38	866.49	525.49	28.276	244.00	5005.61	1281.93	774.72	30.340
165.00	3385.89	871.69	528.60	28.308	245.00	5026.11	1287.12	777.83	30.361
166.00	3406.39	876.88	531.72	28.339	246.00	5046.61	1292.31	780.95	30.382
167.00	3426.90	882.07	534.83	28.371	247.00	5067.12	1297.50	784.07	30.403
168.00	3447.40	887.27	537.95	28.402	248.00	5087.62	1302.70	787.18	30.424
169.00	3467.91	892.46	541.06	28.432	249.00	5108.12	1307.89	790.30	30.445
170.00	3488.41	897.65	544.18	28.463	250.00	5128.62	1313.08	793.41	30.466
171.00	3508.91	902.85	547.30	28.493	251.00	5149.12	1318.28	796.53	30.486
172.00	3529.42	908.04	550.41	28.524	252.00	5169.63	1323.47	799.64	30.507
173.00	3549.92	913.23	553.53	28.554	253.00	5190.13	1328.66	802.76	30.528
174.00	3570.42	918.42	556.64	28.584	254.00	5210.63	1333.85	805.87	30.548
175.00	3590.93	923.62	559.76	28.614	255.00	5231.13	1339.05	808.99	30.569
176.00	3611.43	928.81	562.87	28.643	256.00	5251.63	1344.24	812.10	30.589
177.00	3631.94	934.00	565.99	28.673	257.00	5272.13	1349.43	815.22	30.609
178.00	3652.44	939.20	569.10	28.702	258.00	5292.64	1354.62	818.33	30.629
179.00	3672.94	944.39	572.22	28.731	259.00	5313.14	1359.82	821.45	30.649
180.00	3693.45	949.58	575.33	28.760	260.00	5333.64	1365.01	824.56	30.669
181.00	3713.95	954.78	578.45	28.789	261.00	5354.14	1370.20	827.68	30.689
182.00	3734.45	959.97	581.57	28.817	262.00	5374.64	1375.39	830.79	30.709
183.00	3754.96	965.16	584.68	28.846	263.00	5395.14	1380.59	833.91	30.729
184.00	3775.46	970.36	587.80	28.874	264.00	5415.65	1385.78	837.03	30.749
185.00	3795.96	975.55	590.91	28.902	265.00	5436.15	1390.97	840.14	30.768
186.00	3816.47	980.74	594.03	28.930	266.00	5456.65	1396.17	843.26	30.788
187.00	3836.97	985.93	597.14	28.958	267.00	5477.15	1401.36	846.37	30.807
188.00	3857.47	991.13	600.26	28.986	268.00	5497.65	1406.55	849.49	30.827
189.00	3877.98	996.32	603.37	29.013	269.00	5518.15	1411.74	852.60	30.846
190.00	3898.48	1001.51	606.49	29.041	270.00	5538.66	1416.94	855.72	30.865
191.00	3918.98	1006.71	609.60	29.068	271.00	5559.16	1422.13	858.83	30.885
192.00	3939.49	1011.90	612.72	29.095	272.00	5579.66	1427.32	861.95	30.904
193.00	3959.99	1017.09	615.84	29.122	273.00	5600.16	1432.51	865.06	30.923
194.00	3980.49	1022.29	618.95	29.149	274.00	5620.66	1437.71	868.18	30.942
195.00	4000.99	1027.48	622.07	29.175	275.00	5641.16	1442.90	871.29	30.961
196.00	4021.50	1032.67	625.18	29.202	276.00	5661.67	1448.09	874.41	30.979
197.00	4042.00	1037.86	628.30	29.228	277.00	5682.17	1453.28	877.52	30.998
198.00	4062.50	1043.06	631.41	29.255	278.00	5702.67	1458.48	880.64	31.017
199.00	4083.01	1048.25	634.53	29.281	279.00	5723.17	1463.67	883.75	31.036
200.00	4103.51	1053.44	637.64	29.307	280.00	5743.67	1468.86	886.87	31.054
201.00	4124.01	1058.64	640.76	29.333	281.00	5764.17	1474.06	889.98	31.073
202.00	4144.51	1063.83	643.87	29.359	282.00	5784.67	1479.25	893.10	31.091
203.00	4165.02	1069.02	646.99	29.384	283.00	5805.18	1484.44	896.22	31.109
204.00	4185.52	1074.21	650.11	29.410	284.00	5825.68	1489.63	899.33	31.128
205.00	4206.02	1079.41	653.22	29.435	285.00	5846.18	1494.83	902.45	31.146
206.00	4226.53	1084.60	656.34	29.460	286.00	5866.68	1500.02	905.56	31.164
207.00	4247.03	1089.79	659.45	29.486	287.00	5887.18	1505.21	908.68	31.182
208.00	4267.53	1094.99	662.57	29.511	288.00	5907.68	1510.40	911.79	31.200
209.00	4288.03	1100.18	665.68	29.536	289.00	5928.18	1515.60	914.91	31.218
210.00	4308.54	1105.37	668.80	29.560	290.00	5948.69	1520.79	918.02	31.236
211.00	4329.04	1110.56	671.91	29.585	291.00	5969.19	1525.98	921.14	31.254
212.00	4349.54	1115.76	675.03	29.610	292.00	5989.69	1531.17	924.25	31.272
213.00	4370.04	1120.95	678.14	29.634	293.00	6010.19	1536.37	927.37	31.290
214.00	4390.55	1126.14	681.26	29.658	294.00	6030.69	1541.56	930.48	31.308
215.00	4411.05	1131.34	684.37	29.682	295.00	6051.19	1546.75	933.60	31.325
216.00	4431.55	1136.53	687.49	29.707	296.00	6071.69	1551.94	936.71	31.343
217.00	4452.05	1141.72	690.61	29.731	297.00	6092.19	1557.14	939.83	31.360
218.00	4472.56	1146.91	693.72	29.754	298.00	6112.70	1562.33	942.94	31.378
219.00	4493.06	1152.11	696.84	29.778	299.00	6133.20	1567.52	946.06	31.395
220.00	4513.56	1157.30	699.95	29.802	300.00	6153.70	1572.71	949.17	31.412

2.00 ATMOSPHERE ISOBAR

	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
	3.00	6.87	6.31	4.92	2.275
	4.00	7.45	9.25	7.74	3.136
	5.00	9.36	15.90	14.00	4.550
*	5.031	10.18	16.48	14.42	4.674
*	5.031	24.33	27.68	22.75	6.904
	6.00	45.83	38.23	28.95	8.899
	7.00	59.74	45.04	32.94	9.950
	8.00	72.35	51.27	36.61	10.782
	9.00	84.28	57.20	40.12	11.481
	10.00	95.82	62.94	43.53	12.086
	11.00	107.08	68.57	46.87	12.623
	12.00	118.16	74.12	50.17	13.105
	13.00	129.10	79.60	53.44	13.544
	14.00	139.93	85.04	56.69	13.948
	15.00	150.69	90.45	59.91	14.320
	16.00	161.38	95.83	63.12	14.668
	17.00	172.01	101.18	66.32	14.992
	18.00	182.61	106.52	69.51	15.297
	19.00	193.16	111.84	72.69	15.585
	20.00	203.69	117.14	75.87	15.857
	21.00	214.19	122.44	79.03	16.115
	22.00	224.66	127.73	82.20	16.361
	23.00	235.12	133.00	85.36	16.596
	24.00	245.56	138.28	88.51	16.820
	25.00	255.99	143.54	91.66	17.035
	26.00	266.40	148.80	94.81	17.241
	27.00	276.80	154.05	97.96	17.440
	28.00	287.19	159.30	101.10	17.631
	29.00	297.57	164.55	104.25	17.815
	30.00	307.94	169.79	107.39	17.992
	31.00	318.30	175.03	110.52	18.164
	32.00	328.66	180.27	113.66	18.331
	33.00	339.01	185.50	116.80	18.492
	34.00	349.36	190.73	119.93	18.648
	35.00	359.69	195.96	123.07	18.799
	36.00	370.03	201.19	126.20	18.947
	37.00	380.36	206.41	129.33	19.090
	38.00	390.68	211.64	132.46	19.229
	39.00	401.01	216.86	135.59	19.365
	40.00	411.32	222.08	138.72	19.497
	41.00	421.64	227.30	141.85	19.626
	42.00	431.95	232.52	144.98	19.751
	43.00	442.26	237.73	148.11	19.874
	44.00	452.57	242.95	151.23	19.994
	45.00	462.87	248.16	154.36	20.111
	46.00	473.17	253.38	157.48	20.226
	47.00	483.47	258.59	160.61	20.338
	48.00	493.77	263.80	163.73	20.448
	49.00	504.07	269.01	166.86	20.555
	50.00	514.36	274.22	169.98	20.660
	51.00	524.65	279.43	173.11	20.764
	52.00	534.94	284.64	176.23	20.865
	53.00	545.23	289.85	179.35	20.964
	54.00	555.52	295.06	182.48	21.061
	55.00	565.81	300.26	185.60	21.157
	56.00	576.09	305.47	188.72	21.251
	57.00	586.38	310.68	191.84	21.343
	58.00	596.66	315.88	194.97	21.433
	59.00	606.94	321.09	198.09	21.522
	60.00	617.22	326.29	201.21	21.610
	61.00	627.50	331.50	204.33	21.696
	62.00	637.78	336.70	207.45	21.780
	63.00	648.06	341.90	210.57	21.864
	64.00	658.34	347.11	213.69	21.946
	65.00	668.61	352.31	216.81	22.026
	66.00	678.89	357.51	219.93	22.106
	67.00	689.16	362.72	223.05	22.184
	68.00	699.44	367.92	226.17	22.261
	69.00	709.71	373.12	229.29	22.337
	70.00	719.98	378.32	232.41	22.412
	71.00	730.25	383.52	235.53	22.486
	72.00	740.52	388.72	238.65	22.558
	73.00	750.80	393.92	241.77	22.630
	74.00	761.07	399.12	244.89	22.701
	75.00	771.33	404.32	248.01	22.771
	76.00	781.60	409.52	251.13	22.839
	77.00	791.87	414.72	254.25	22.907
	78.00	802.14	419.92	257.37	22.975
	79.00	812.41	425.12	260.48	23.041
	80.00	822.68	430.32	263.60	23.106
	81.00	832.94	435.52	266.72	23.171
	82.00	843.21	440.72	269.84	23.235
	83.00	853.48	445.92	272.96	23.298
	84.00	863.74	451.12	276.08	23.360
	85.00	874.01	456.32	279.20	23.421
	86.00	884.27	461.52	282.31	23.482
	87.00	894.54	466.71	285.43	23.542
	88.00	904.80	471.91	288.55	23.602
	89.00	915.06	477.11	291.67	23.660
	90.00	925.33	482.31	294.79	23.718
	91.00	935.59	487.51	297.90	23.776
	92.00	945.86	492.70	301.02	23.833
	93.00	956.12	497.90	304.14	23.889
	94.00	966.38	503.10	307.26	23.945
	95.00	976.64	508.30	310.37	24.000
	96.00	986.91	513.49	313.49	24.054
	97.00	997.17	518.69	316.61	24.108
	98.00	1007.43	523.89	319.73	24.161
	99.00	1017.69	529.08	322.84	24.214
	100.00	1027.95	534.28	325.96	24.266
	101.00	1038.21	539.48	329.08	24.318
	102.00	1048.47	544.68	332.20	24.369
	103.00	1058.73	549.87	335.31	24.420
	104.00	1068.99	555.07	338.43	24.470
	105.00	1079.25	560.26	341.55	24.520
	106.00	1089.51	565.46	344.67	24.569
	107.00	1099.77	570.66	347.78	24.618
	108.00	1110.03	575.85	350.90	24.666
	109.00	1120.29	581.05	354.02	24.714
	110.00	1130.55	586.25	357.13	24.761
	111.00	1140.81	591.44	360.25	24.808
	112.00	1151.07	596.64	363.37	24.855
	113.00	1161.33	601.83	366.48	24.901
	114.00	1171.59	607.03	369.60	24.947
	115.00	1181.85	612.23	372.72	24.992
	116.00	1192.10	617.42	375.83	25.037
	117.00	1202.36	622.62	378.95	25.082
	118.00	1212.62	627.81	382.07	25.126
	119.00	1222.88	633.01	385.19	25.170
	120.00	1233.14	638.20	388.30	25.213
	121.00	1243.39	643.40	391.42	25.257
	122.00	1253.65	648.59	394.54	25.299
	123.00	1263.91	653.79	397.65	25.342
	124.00	1274.16	658.98	400.77	25.384
	125.00	1284.42	664.18	403.88	25.426
	126.00	1294.68	669.38	407.00	25.467
	127.00	1304.94	674.57	410.12	25.508
	128.00	1315.19	679.77	413.23	25.549
	129.00	1325.45	684.96	416.35	25.589
	130.00	1335.71	690.16	419.47	25.629
	131.00	1345.96	695.35	422.58	25.669
	132.00	1356.22	700.55	425.70	25.709
	133.00	1366.48	705.74	428.82	25.748
	134.00	1376.73	710.94	431.93	25.787
	135.00	1386.99	716.13	435.05	25.825
	136.00	1397.24	721.32	438.17	25.864
	137.00	1407.50	726.52	441.28	25.902
	138.00	1417.76	731.71	444.40	25.940
	139.00	1428.01	736.91	447.51	25.977
	140.00	1438.27	742.10	450.63	26.014

* PHASE CHANGE

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	1448.52	747.30	453.75	26.051	221.00	2268.81	1162.80	703.02	28.385
142.00	1458.78	752.49	456.86	26.088	222.00	2279.06	1167.99	706.13	28.409
143.00	1469.03	757.69	459.98	26.124	223.00	2289.31	1173.19	709.25	28.432
144.00	1479.29	762.88	463.10	26.161	224.00	2299.57	1178.38	712.36	28.455
145.00	1489.54	768.08	466.21	26.197	225.00	2309.82	1183.57	715.48	28.479
146.00	1499.80	773.27	469.33	26.232	226.00	2320.07	1188.77	718.59	28.502
147.00	1510.06	778.47	472.44	26.268	227.00	2330.32	1193.96	721.71	28.524
148.00	1520.31	783.66	475.56	26.303	228.00	2340.58	1199.15	724.82	28.547
149.00	1530.57	788.85	478.68	26.338	229.00	2350.83	1204.35	727.94	28.570
150.00	1540.82	794.05	481.79	26.373	230.00	2361.08	1209.54	731.06	28.593
151.00	1551.08	799.24	484.91	26.407	231.00	2371.33	1214.73	734.17	28.615
152.00	1561.33	804.44	488.03	26.441	232.00	2381.58	1219.93	737.29	28.638
153.00	1571.58	809.63	491.14	26.476	233.00	2391.84	1225.12	740.40	28.660
154.00	1581.84	814.83	494.26	26.509	234.00	2402.09	1230.31	743.52	28.682
155.00	1592.09	820.02	497.37	26.543	235.00	2412.34	1235.51	746.63	28.704
156.00	1602.35	825.21	500.49	26.576	236.00	2422.59	1240.70	749.75	28.726
157.00	1612.60	830.41	503.61	26.610	237.00	2432.84	1245.89	752.86	28.748
158.00	1622.86	835.60	506.72	26.643	238.00	2443.10	1251.09	755.98	28.770
159.00	1633.11	840.80	509.84	26.675	239.00	2453.35	1256.28	759.10	28.792
160.00	1643.37	845.99	512.95	26.708	240.00	2463.60	1261.47	762.21	28.814
161.00	1653.62	851.18	516.07	26.740	241.00	2473.85	1266.67	765.33	28.835
162.00	1663.88	856.38	519.19	26.772	242.00	2484.10	1271.86	768.44	28.857
163.00	1674.13	861.57	522.30	26.804	243.00	2494.36	1277.05	771.56	28.878
164.00	1684.38	866.77	525.42	26.836	244.00	2504.61	1282.24	774.67	28.900
165.00	1694.64	871.96	528.53	26.868	245.00	2514.86	1287.44	777.79	28.921
166.00	1704.89	877.16	531.65	26.899	246.00	2525.11	1292.63	780.90	28.942
167.00	1715.15	882.35	534.77	26.930	247.00	2535.36	1297.82	784.02	28.963
168.00	1725.40	887.54	537.88	26.961	248.00	2545.62	1303.02	787.13	28.984
169.00	1735.65	892.74	541.00	26.992	249.00	2555.87	1308.21	790.25	29.005
170.00	1745.91	897.93	544.11	27.023	250.00	2566.12	1313.40	793.37	29.026
171.00	1756.16	903.12	547.23	27.053	251.00	2576.37	1318.60	796.48	29.046
172.00	1766.42	908.32	550.34	27.084	252.00	2586.62	1323.79	799.60	29.067
173.00	1776.67	913.51	553.46	27.114	253.00	2596.87	1328.98	802.71	29.088
174.00	1786.92	918.71	556.58	27.144	254.00	2607.13	1334.18	805.83	29.108
175.00	1797.18	923.90	559.69	27.173	255.00	2617.38	1339.37	808.94	29.129
176.00	1807.43	929.09	562.81	27.203	256.00	2627.63	1344.56	812.06	29.149
177.00	1817.68	934.29	565.92	27.232	257.00	2637.88	1349.75	815.17	29.169
178.00	1827.94	939.48	569.04	27.262	258.00	2648.13	1354.95	818.29	29.189
179.00	1838.19	944.68	572.16	27.291	259.00	2658.38	1360.14	821.40	29.209
180.00	1848.44	949.87	575.27	27.320	260.00	2668.64	1365.33	824.52	29.229
181.00	1858.70	955.06	578.39	27.348	261.00	2678.89	1370.53	827.64	29.249
182.00	1868.95	960.26	581.50	27.377	262.00	2689.14	1375.72	830.75	29.269
183.00	1879.20	965.45	584.62	27.405	263.00	2699.39	1380.91	833.87	29.289
184.00	1889.46	970.64	587.73	27.434	264.00	2709.64	1386.11	836.98	29.309
185.00	1899.71	975.84	590.85	27.462	265.00	2719.89	1391.30	840.10	29.328
186.00	1909.96	981.03	593.97	27.490	266.00	2730.15	1396.49	843.21	29.348
187.00	1920.22	986.22	597.08	27.518	267.00	2740.40	1401.68	846.33	29.367
188.00	1930.47	991.42	600.20	27.545	268.00	2750.65	1406.88	849.44	29.387
189.00	1940.72	996.61	603.31	27.573	269.00	2760.90	1412.07	852.56	29.406
190.00	1950.98	1001.81	606.43	27.600	270.00	2771.15	1417.26	855.67	29.425
191.00	1961.23	1007.00	609.55	27.628	271.00	2781.40	1422.46	858.79	29.445
192.00	1971.48	1012.19	612.66	27.655	272.00	2791.66	1427.65	861.91	29.464
193.00	1981.74	1017.39	615.78	27.682	273.00	2801.91	1432.84	865.02	29.483
194.00	1991.99	1022.58	618.89	27.709	274.00	2812.16	1438.04	868.14	29.502
195.00	2002.24	1027.77	622.01	27.735	275.00	2822.41	1443.23	871.25	29.521
196.00	2012.50	1032.97	625.12	27.762	276.00	2832.66	1448.42	874.37	29.539
197.00	2022.75	1038.16	628.24	27.788	277.00	2842.91	1453.61	877.48	29.558
198.00	2033.00	1043.35	631.36	27.815	278.00	2853.16	1458.81	880.60	29.577
199.00	2043.25	1048.55	634.47	27.841	279.00	2863.42	1464.00	883.71	29.596
200.00	2053.51	1053.74	637.59	27.867	280.00	2873.67	1469.19	886.83	29.614
201.00	2063.76	1058.93	640.70	27.893	281.00	2883.92	1474.39	889.94	29.633
202.00	2074.01	1064.13	643.82	27.919	282.00	2894.17	1479.58	893.06	29.651
203.00	2084.26	1069.32	646.93	27.944	283.00	2904.42	1484.77	896.18	29.670
204.00	2094.52	1074.51	650.05	27.970	284.00	2914.67	1489.96	899.29	29.688
205.00	2104.77	1079.71	653.17	27.995	285.00	2924.92	1495.16	902.41	29.706
206.00	2115.02	1084.90	656.28	28.020	286.00	2935.18	1500.35	905.52	29.724
207.00	2125.28	1090.10	659.40	28.045	287.00	2945.43	1505.54	908.64	29.742
208.00	2135.53	1095.29	662.51	28.071	288.00	2955.68	1510.74	911.75	29.760
209.00	2145.78	1100.48	665.63	28.095	289.00	2965.93	1515.93	914.87	29.778
210.00	2156.03	1105.68	668.74	28.120	290.00	2976.18	1521.12	917.98	29.796
211.00	2166.29	1110.87	671.86	28.145	291.00	2986.43	1526.32	921.10	29.814
212.00	2176.54	1116.06	674.97	28.169	292.00	2996.68	1531.51	924.21	29.832
213.00	2186.79	1121.26	678.09	28.194	293.00	3006.94	1536.70	927.33	29.850
214.00	2197.04	1126.45	681.21	28.218	294.00	3017.19	1541.89	930.44	29.868
215.00	2207.30	1131.64	684.32	28.242	295.00	3027.44	1547.09	933.56	29.885
216.00	2217.55	1136.84	687.44	28.267	296.00	3037.69	1552.28	936.68	29.903
217.00	2227.80	1142.03	690.55	28.291	297.00	3047.94	1557.47	939.79	29.920
218.00	2238.05	1147.22	693.67	28.314	298.00	3058.19	1562.67	942.91	29.938
219.00	2248.31	1152.42	696.78	28.338	299.00	3068.44	1567.86	946.02	29.955
220.00	2258.56	1157.61	699.90	28.362	300.00	3078.69	1573.05	949.14	29.972

3.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	6.77	6.89	4.83	2.237
4.00	7.27	9.69	7.48	3.060
5.00	8.41	14.32	11.77	4.104
6.00	24.12	33.02	25.69	7.462
7.00	35.72	41.66	30.80	8.799
8.00	45.14	48.66	34.94	9.735
9.00	53.73	55.06	38.73	10.489
10.00	61.86	61.13	42.33	11.129
11.00	69.70	67.00	45.81	11.689
12.00	77.35	72.73	49.22	12.187
13.00	84.86	78.37	52.57	12.639
14.00	92.26	83.93	55.89	13.051
15.00	99.59	89.44	59.17	13.431
16.00	106.85	94.91	62.43	13.784
17.00	114.06	100.34	65.67	14.114
18.00	121.22	105.75	68.90	14.423
19.00	128.35	111.13	72.11	14.714
20.00	135.46	116.49	75.32	14.989
21.00	142.53	121.84	78.51	15.249
22.00	149.58	127.17	81.70	15.497
23.00	156.62	132.49	84.88	15.734
24.00	163.64	137.80	88.06	15.960
25.00	170.64	143.10	91.23	16.176
26.00	177.63	148.39	94.39	16.384
27.00	184.61	153.67	97.55	16.583
28.00	191.58	158.95	100.71	16.775
29.00	198.54	164.22	103.87	16.960
30.00	205.49	169.49	107.02	17.138
31.00	212.43	174.75	110.17	17.311
32.00	219.37	180.00	113.32	17.478
33.00	226.30	185.26	116.47	17.640
34.00	233.23	190.51	119.61	17.796
35.00	240.15	195.75	122.75	17.948
36.00	247.06	201.00	125.89	18.096
37.00	253.98	206.24	129.03	18.240
38.00	260.88	211.48	132.17	18.379
39.00	267.79	216.71	135.31	18.515
40.00	274.69	221.95	138.45	18.648
41.00	281.58	227.18	141.58	18.777
42.00	288.48	232.41	144.72	18.903
43.00	295.37	237.64	147.85	19.026
44.00	302.26	242.86	150.98	19.146
45.00	309.15	248.09	154.11	19.264
46.00	316.03	253.31	157.24	19.379
47.00	322.91	258.53	160.37	19.491
48.00	329.79	263.76	163.50	19.601
49.00	336.67	268.98	166.63	19.708
50.00	343.55	274.19	169.76	19.814
51.00	350.42	279.41	172.89	19.917
52.00	357.29	284.63	176.02	20.018
53.00	364.17	289.85	179.14	20.118
54.00	371.04	295.06	182.27	20.215
55.00	377.91	300.27	185.40	20.311
56.00	384.77	305.49	188.52	20.405
57.00	391.64	310.70	191.65	20.497
58.00	398.51	315.91	194.77	20.588
59.00	405.37	321.12	197.90	20.677
60.00	412.23	326.34	201.02	20.764
61.00	419.10	331.55	204.15	20.851
62.00	425.96	336.76	207.27	20.935
63.00	432.82	341.96	210.39	21.019
64.00	439.68	347.17	213.52	21.101
65.00	446.54	352.38	216.64	21.181
66.00	453.40	357.59	219.76	21.261
67.00	460.25	362.80	222.89	21.339
68.00	467.11	368.00	226.01	21.416
69.00	473.97	373.21	229.13	21.492
70.00	480.82	378.42	232.25	21.567
71.00	487.68	383.62	235.38	21.641
72.00	494.53	388.83	238.50	21.714
73.00	501.39	394.03	241.62	21.786
74.00	508.24	399.24	244.74	21.857
75.00	515.09	404.44	247.86	21.926
76.00	521.94	409.64	250.98	21.995
77.00	528.80	414.85	254.10	22.063
78.00	535.65	420.05	257.22	22.131
79.00	542.50	425.25	260.34	22.197
80.00	549.35	430.46	263.46	22.262
81.00	556.20	435.66	266.58	22.327
82.00	563.05	440.86	269.70	22.391
83.00	569.90	446.06	272.82	22.454
84.00	576.75	451.27	275.94	22.516
85.00	583.60	456.47	279.06	22.578
86.00	590.44	461.67	282.18	22.638
87.00	597.29	466.87	285.30	22.699
88.00	604.14	472.07	288.42	22.758
89.00	610.99	477.27	291.54	22.817
90.00	617.83	482.47	294.66	22.875
91.00	624.68	487.67	297.78	22.932
92.00	631.53	492.87	300.90	22.989
93.00	638.37	498.07	304.02	23.045
94.00	645.22	503.27	307.14	23.101
95.00	652.06	508.47	310.26	23.156
96.00	658.91	513.67	313.38	23.210
97.00	665.75	518.87	316.49	23.264
98.00	672.60	524.07	319.61	23.318
99.00	679.44	529.27	322.73	23.370
100.00	686.29	534.47	325.85	23.423
101.00	693.13	539.67	328.97	23.474
102.00	699.98	544.87	332.09	23.526
103.00	706.82	550.07	335.20	23.576
104.00	713.66	555.26	338.32	23.627
105.00	720.51	560.46	341.44	23.676
106.00	727.35	565.66	344.56	23.726
107.00	734.19	570.86	347.68	23.774
108.00	741.04	576.06	350.80	23.823
109.00	747.88	581.26	353.91	23.871
110.00	754.72	586.45	357.03	23.918
111.00	761.56	591.65	360.15	23.965
112.00	768.40	596.85	363.27	24.012
113.00	775.25	602.05	366.38	24.058
114.00	782.09	607.24	369.50	24.104
115.00	788.93	612.44	372.62	24.149
116.00	795.77	617.64	375.74	24.194
117.00	802.61	622.84	378.86	24.239
118.00	809.45	628.03	381.97	24.283
119.00	816.30	633.23	385.09	24.327
120.00	823.14	638.43	388.21	24.370
121.00	829.98	643.62	391.33	24.414
122.00	836.82	648.82	394.44	24.456
123.00	843.66	654.02	397.56	24.499
124.00	850.50	659.22	400.68	24.541
125.00	857.34	664.41	403.79	24.583
126.00	864.18	669.61	406.91	24.624
127.00	871.02	674.81	410.03	24.665
128.00	877.86	680.00	413.15	24.706
129.00	884.70	685.20	416.26	24.746
130.00	891.54	690.39	419.38	24.786
131.00	898.38	695.59	422.50	24.826
132.00	905.22	700.79	425.62	24.866
133.00	912.06	705.98	428.73	24.905
134.00	918.90	711.18	431.85	24.944
135.00	925.74	716.38	434.97	24.982
136.00	932.58	721.57	438.08	25.021
137.00	939.42	726.77	441.20	25.059
138.00	946.26	731.96	444.32	25.097
139.00	953.10	737.16	447.43	25.134
140.00	959.93	742.35	450.55	25.171

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	966.77	747.55	453.67	25.208	221.00	1513.73	1163.11	702.96	27.543
142.00	973.61	752.75	456.78	25.245	222.00	1520.56	1168.30	706.08	27.566
143.00	980.45	757.94	459.90	25.282	223.00	1527.40	1173.50	709.20	27.590
144.00	987.29	763.14	463.02	25.318	224.00	1534.23	1178.69	712.31	27.613
145.00	994.13	768.33	466.13	25.354	225.00	1541.07	1183.89	715.43	27.636
146.00	1000.97	773.53	469.25	25.389	226.00	1547.90	1189.08	718.54	27.659
147.00	1007.81	778.72	472.37	25.425	227.00	1554.74	1194.27	721.66	27.682
148.00	1014.64	783.92	475.48	25.460	228.00	1561.57	1199.47	724.77	27.705
149.00	1021.48	789.11	478.60	25.495	229.00	1568.41	1204.66	727.89	27.728
150.00	1028.32	794.31	481.72	25.530	230.00	1575.25	1209.85	731.01	27.750
151.00	1035.16	799.51	484.83	25.564	231.00	1582.08	1215.05	734.12	27.773
152.00	1042.00	804.70	487.95	25.599	232.00	1588.92	1220.24	737.24	27.795
153.00	1048.84	809.90	491.07	25.633	233.00	1595.75	1225.43	740.35	27.818
154.00	1055.67	815.09	494.18	25.667	234.00	1602.59	1230.63	743.47	27.840
155.00	1062.51	820.29	497.30	25.700	235.00	1609.42	1235.82	746.58	27.862
156.00	1069.35	825.48	500.42	25.734	236.00	1616.26	1241.02	749.70	27.884
157.00	1076.19	830.68	503.53	25.767	237.00	1623.09	1246.21	752.82	27.906
158.00	1083.02	835.87	506.65	25.800	238.00	1629.93	1251.40	755.93	27.928
159.00	1089.86	841.07	509.77	25.833	239.00	1636.76	1256.60	759.05	27.950
160.00	1096.70	846.26	512.88	25.865	240.00	1643.60	1261.79	762.16	27.971
161.00	1103.54	851.46	516.00	25.898	241.00	1650.43	1266.98	765.28	27.993
162.00	1110.38	856.65	519.12	25.930	242.00	1657.27	1272.18	768.39	28.014
163.00	1117.21	861.85	522.23	25.962	243.00	1664.10	1277.37	771.51	28.036
164.00	1124.05	867.04	525.35	25.993	244.00	1670.94	1282.56	774.63	28.057
165.00	1130.89	872.24	528.47	26.025	245.00	1677.78	1287.76	777.74	28.078
166.00	1137.73	877.43	531.58	26.056	246.00	1684.61	1292.95	780.86	28.099
167.00	1144.56	882.63	534.70	26.088	247.00	1691.45	1298.14	783.97	28.121
168.00	1151.40	887.82	537.81	26.119	248.00	1698.28	1303.34	787.09	28.142
169.00	1158.24	893.01	540.93	26.149	249.00	1705.12	1308.53	790.20	28.162
170.00	1165.07	898.21	544.05	26.180	250.00	1711.95	1313.72	793.32	28.183
171.00	1171.91	903.40	547.16	26.211	251.00	1718.79	1318.92	796.44	28.204
172.00	1178.75	908.60	550.28	26.241	252.00	1725.62	1324.11	799.55	28.225
173.00	1185.59	913.79	553.40	26.271	253.00	1732.46	1329.30	802.67	28.245
174.00	1192.42	918.99	556.51	26.301	254.00	1739.29	1334.50	805.78	28.266
175.00	1199.26	924.18	559.63	26.331	255.00	1746.13	1339.69	808.90	28.286
176.00	1206.10	929.38	562.74	26.360	256.00	1752.96	1344.88	812.01	28.306
177.00	1212.93	934.57	565.86	26.390	257.00	1759.80	1350.08	815.13	28.327
178.00	1219.77	939.77	568.98	26.419	258.00	1766.63	1355.27	818.25	28.347
179.00	1226.61	944.96	572.09	26.448	259.00	1773.47	1360.47	821.36	28.367
180.00	1233.44	950.16	575.21	26.477	260.00	1780.30	1365.66	824.48	28.387
181.00	1240.28	955.35	578.33	26.506	261.00	1787.14	1370.85	827.59	28.407
182.00	1247.12	960.54	581.44	26.534	262.00	1793.97	1376.05	830.71	28.427
183.00	1253.95	965.74	584.56	26.563	263.00	1800.81	1381.24	833.82	28.447
184.00	1260.79	970.93	587.67	26.591	264.00	1807.64	1386.43	836.94	28.466
185.00	1267.63	976.13	590.79	26.619	265.00	1814.48	1391.63	840.05	28.486
186.00	1274.46	981.32	593.91	26.647	266.00	1821.31	1396.82	843.17	28.505
187.00	1281.30	986.52	597.02	26.675	267.00	1828.15	1402.01	846.29	28.525
188.00	1288.14	991.71	600.14	26.703	268.00	1834.98	1407.20	849.40	28.544
189.00	1294.97	996.90	603.25	26.730	269.00	1841.82	1412.40	852.52	28.564
190.00	1301.81	1002.10	606.37	26.758	270.00	1848.65	1417.59	855.63	28.583
191.00	1308.65	1007.29	609.49	26.785	271.00	1855.49	1422.78	858.75	28.602
192.00	1315.48	1012.49	612.60	26.812	272.00	1862.32	1427.98	861.86	28.621
193.00	1322.32	1017.68	615.72	26.839	273.00	1869.16	1433.17	864.98	28.640
194.00	1329.16	1022.88	618.83	26.866	274.00	1875.99	1438.36	868.10	28.659
195.00	1335.99	1028.07	621.95	26.893	275.00	1882.83	1443.56	871.21	28.678
196.00	1342.83	1033.26	625.07	26.919	276.00	1889.66	1448.75	874.33	28.697
197.00	1349.66	1038.46	628.18	26.946	277.00	1896.49	1453.94	877.44	28.716
198.00	1356.50	1043.65	631.30	26.972	278.00	1903.33	1459.14	880.56	28.735
199.00	1363.34	1048.85	634.41	26.998	279.00	1910.16	1464.33	883.67	28.753
200.00	1370.17	1054.04	637.53	27.024	280.00	1917.00	1469.52	886.79	28.772
201.00	1377.01	1059.23	640.65	27.050	281.00	1923.83	1474.72	889.90	28.790
202.00	1383.84	1064.43	643.76	27.076	282.00	1930.67	1479.91	893.02	28.809
203.00	1390.68	1069.62	646.88	27.102	283.00	1937.50	1485.10	896.14	28.827
204.00	1397.52	1074.82	649.99	27.127	284.00	1944.34	1490.30	899.25	28.845
205.00	1404.35	1080.01	653.11	27.153	285.00	1951.17	1495.49	902.37	28.864
206.00	1411.19	1085.20	656.23	27.178	286.00	1958.01	1500.68	905.48	28.882
207.00	1418.02	1090.40	659.34	27.203	287.00	1964.84	1505.88	908.60	28.900
208.00	1424.86	1095.59	662.46	27.228	288.00	1971.68	1511.07	911.71	28.918
209.00	1431.70	1100.79	665.57	27.253	289.00	1978.51	1516.26	914.83	28.936
210.00	1438.53	1105.98	668.69	27.278	290.00	1985.35	1521.46	917.94	28.954
211.00	1445.37	1111.17	671.81	27.302	291.00	1992.18	1526.65	921.06	28.972
212.00	1452.20	1116.37	674.92	27.327	292.00	1999.02	1531.84	924.18	28.990
213.00	1459.04	1121.56	678.04	27.351	293.00	2005.85	1537.04	927.29	29.007
214.00	1465.88	1126.75	681.15	27.376	294.00	2012.69	1542.23	930.41	29.025
215.00	1472.71	1131.95	684.27	27.400	295.00	2019.52	1547.42	933.52	29.043
216.00	1479.55	1137.14	687.38	27.424	296.00	2026.35	1552.61	936.64	29.060
217.00	1486.38	1142.34	690.50	27.448	297.00	2033.19	1557.81	939.75	29.078
218.00	1493.22	1147.53	693.62	27.472	298.00	2040.02	1563.00	942.87	29.095
219.00	1500.05	1152.72	696.73	27.496	299.00	2046.86	1568.19	945.98	29.113
220.00	1506.89	1157.92	699.85	27.519	300.00	2053.69	1573.39	949.10	29.130

4.00 ATMOSPHERE ISO8AR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
					61.00	314.90	331.60	203.97	20.250
					62.00	320.05	336.81	207.09	20.335
					63.00	325.21	342.03	210.22	20.418
					64.00	330.36	347.24	213.35	20.500
					65.00	335.51	352.46	216.47	20.581
					66.00	340.66	357.67	219.60	20.661
					67.00	345.81	362.88	222.72	20.739
					68.00	350.95	368.09	225.85	20.816
					69.00	356.10	373.30	228.97	20.893
					70.00	361.25	378.51	232.10	20.968
					71.00	366.39	383.72	235.22	21.041
					72.00	371.54	388.93	238.34	21.114
					73.00	376.69	394.14	241.47	21.186
					74.00	381.83	399.35	244.59	21.257
					75.00	386.97	404.56	247.71	21.327
					76.00	392.12	409.77	250.84	21.396
					77.00	397.26	414.97	253.96	21.464
					78.00	402.40	420.18	257.08	21.531
					79.00	407.55	425.39	260.20	21.597
					80.00	412.69	430.59	263.33	21.663
					81.00	417.83	435.80	266.45	21.728
					82.00	422.97	441.00	269.57	21.791
3.00	6.68	7.46	4.76	2.204	83.00	428.11	446.21	272.69	21.855
4.00	7.12	10.16	7.28	2.997	84.00	433.25	451.41	275.81	21.917
5.00	7.99	14.32	11.08	3.939	85.00	438.39	456.62	278.93	21.979
6.00	12.01	24.58	19.72	5.761	86.00	443.53	461.82	282.05	22.039
7.00	23.73	37.95	28.33	7.847	87.00	448.67	467.03	285.18	22.100
8.00	31.67	45.99	33.15	8.923	88.00	453.81	472.23	288.30	22.159
9.00	38.58	52.92	37.28	9.741	89.00	458.95	477.43	291.42	22.218
10.00	45.00	59.34	41.10	10.417	90.00	464.09	482.64	294.54	22.276
11.00	51.12	65.46	44.74	11.000	91.00	469.23	487.84	297.66	22.333
12.00	57.05	71.38	48.26	11.516	92.00	474.36	493.04	300.78	22.390
13.00	62.83	77.17	51.70	11.979	93.00	479.50	498.25	303.90	22.447
14.00	68.51	82.86	55.09	12.401	94.00	484.64	503.45	307.02	22.502
15.00	74.12	88.47	58.43	12.788	95.00	489.78	508.65	310.14	22.557
16.00	79.65	94.03	61.74	13.147	96.00	494.91	513.85	313.26	22.612
17.00	85.14	99.54	65.03	13.481	97.00	500.05	519.05	316.38	22.666
18.00	90.59	105.01	68.29	13.794	98.00	505.19	524.26	319.50	22.719
19.00	96.00	110.45	71.54	14.088	99.00	510.32	529.46	322.62	22.772
20.00	101.39	115.87	74.77	14.366	100.00	515.46	534.66	325.74	22.824
21.00	106.75	121.26	78.00	14.629	101.00	520.59	539.86	328.86	22.876
22.00	112.09	126.64	81.21	14.879	102.00	525.73	545.06	331.98	22.927
23.00	117.41	132.00	84.41	15.117	103.00	530.86	550.26	335.10	22.978
24.00	122.71	137.34	87.60	15.345	104.00	536.00	555.46	338.22	23.028
25.00	128.00	142.67	90.79	15.562	105.00	541.13	560.66	341.34	23.078
26.00	133.28	147.99	93.98	15.771	106.00	546.27	565.86	344.45	23.127
27.00	138.54	153.31	97.15	15.971	107.00	551.40	571.06	347.57	23.176
28.00	143.80	158.61	100.33	16.164	108.00	556.54	576.26	350.69	23.224
29.00	149.05	163.91	103.49	16.350	109.00	561.67	581.46	353.81	23.272
30.00	154.29	169.20	106.66	16.529	110.00	566.81	586.66	356.93	23.320
31.00	159.52	174.48	109.82	16.703	111.00	571.94	591.86	360.05	23.367
32.00	164.75	179.76	112.98	16.870	112.00	577.07	597.06	363.17	23.413
33.00	169.97	185.03	116.14	17.032	113.00	582.21	602.26	366.29	23.460
34.00	175.18	190.30	119.29	17.190	114.00	587.34	607.46	369.40	23.505
35.00	180.39	195.56	122.44	17.342	115.00	592.47	612.66	372.52	23.551
36.00	185.60	200.82	125.59	17.490	116.00	597.61	617.86	375.64	23.596
37.00	190.80	206.07	128.74	17.634	117.00	602.74	623.06	378.76	23.640
38.00	196.00	211.33	131.89	17.775	118.00	607.87	628.26	381.88	23.685
39.00	201.19	216.58	135.03	17.911	119.00	613.01	633.45	385.00	23.729
40.00	206.38	221.82	138.17	18.044	120.00	618.14	638.65	388.11	23.772
41.00	211.57	227.07	141.32	18.173	121.00	623.27	643.85	391.23	23.815
42.00	216.76	232.31	144.46	18.300	122.00	628.40	649.05	394.35	23.858
43.00	221.94	237.55	147.59	18.423	123.00	633.54	654.25	397.47	23.900
44.00	227.12	242.79	150.73	18.543	124.00	638.67	659.45	400.59	23.943
45.00	232.29	248.02	153.87	18.661	125.00	643.80	664.64	403.71	23.984
46.00	237.47	253.25	157.01	18.776	126.00	648.93	669.84	406.82	24.026
47.00	242.64	258.49	160.14	18.888	127.00	654.06	675.04	409.94	24.067
48.00	247.81	263.72	163.28	18.999	128.00	659.20	680.24	413.06	24.108
49.00	252.98	268.95	166.41	19.106	129.00	664.33	685.44	416.18	24.148
50.00	258.15	274.17	169.54	19.212	130.00	669.46	690.63	419.29	24.188
51.00	263.31	279.40	172.67	19.315	131.00	674.59	695.83	422.41	24.228
52.00	268.48	284.62	175.81	19.417	132.00	679.72	701.03	425.53	24.268
53.00	273.64	289.85	178.94	19.516	133.00	684.85	706.23	428.65	24.307
54.00	278.80	295.07	182.07	19.614	134.00	689.98	711.42	431.77	24.346
55.00	283.96	300.29	185.20	19.710	135.00	695.12	716.62	434.88	24.384
56.00	289.12	305.51	188.33	19.804	136.00	700.25	721.82	438.00	24.423
57.00	294.28	310.73	191.46	19.896	137.00	705.38	727.02	441.12	24.461
58.00	299.44	315.95	194.58	19.987	138.00	710.51	732.21	444.24	24.499
59.00	304.59	321.17	197.71	20.076	139.00	715.64	737.41	447.35	24.536
60.00	309.75	326.38	200.84	20.164	140.00	720.77	742.61	450.47	24.573

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	725.90	747.80	453.59	24.610	221.00	1136.18	1163.42	702.91	26.945
142.00	731.03	753.00	456.71	24.647	222.00	1141.31	1168.61	706.03	26.969
143.00	736.16	758.20	459.82	24.683	223.00	1146.44	1173.81	709.14	26.992
144.00	741.29	763.39	462.94	24.720	224.00	1151.57	1179.00	712.26	27.015
145.00	746.42	768.59	466.06	24.756	225.00	1156.69	1184.20	715.38	27.038
146.00	751.55	773.79	469.17	24.791	226.00	1161.82	1189.39	718.49	27.061
147.00	756.68	778.98	472.29	24.827	227.00	1166.95	1194.59	721.61	27.084
148.00	761.81	784.18	475.41	24.862	228.00	1172.07	1199.78	724.73	27.107
149.00	766.94	789.38	478.53	24.897	229.00	1177.20	1204.97	727.84	27.130
150.00	772.07	794.57	481.64	24.932	230.00	1182.33	1210.17	730.96	27.152
151.00	777.20	799.77	484.76	24.966	231.00	1187.46	1215.36	734.07	27.175
152.00	782.33	804.96	487.88	25.001	232.00	1192.58	1220.56	737.19	27.197
153.00	787.46	810.16	490.99	25.035	233.00	1197.71	1225.75	740.30	27.220
154.00	792.59	815.36	494.11	25.069	234.00	1202.84	1230.94	743.42	27.242
155.00	797.72	820.55	497.23	25.102	235.00	1207.96	1236.14	746.54	27.264
156.00	802.85	825.75	500.35	25.136	236.00	1213.09	1241.33	749.65	27.286
157.00	807.98	830.94	503.46	25.169	237.00	1218.22	1246.53	752.77	27.308
158.00	813.11	836.14	506.58	25.202	238.00	1223.34	1251.72	755.88	27.330
159.00	818.24	841.34	509.70	25.235	239.00	1228.47	1256.91	759.00	27.352
160.00	823.37	846.53	512.81	25.267	240.00	1233.60	1262.11	762.12	27.373
161.00	828.50	851.73	515.93	25.300	241.00	1238.73	1267.30	765.23	27.395
162.00	833.63	856.92	519.05	25.332	242.00	1243.85	1272.49	768.35	27.417
163.00	838.76	862.12	522.16	25.364	243.00	1248.98	1277.69	771.46	27.438
164.00	843.88	867.32	525.28	25.395	244.00	1254.11	1282.88	774.58	27.459
165.00	849.01	872.51	528.40	25.427	245.00	1259.23	1288.08	777.70	27.481
166.00	854.14	877.71	531.51	25.458	246.00	1264.36	1293.27	780.81	27.502
167.00	859.27	882.90	534.63	25.490	247.00	1269.49	1298.46	783.93	27.523
168.00	864.40	888.10	537.75	25.521	248.00	1274.61	1303.66	787.04	27.544
169.00	869.53	893.29	540.86	25.552	249.00	1279.74	1308.85	790.16	27.565
170.00	874.66	898.49	543.98	25.582	250.00	1284.87	1314.05	793.28	27.585
171.00	879.79	903.68	547.10	25.613	251.00	1289.99	1319.24	796.39	27.606
172.00	884.92	908.88	550.21	25.643	252.00	1295.12	1324.43	799.51	27.627
173.00	890.04	914.08	553.33	25.673	253.00	1300.25	1329.63	802.62	27.647
174.00	895.17	919.27	556.45	25.703	254.00	1305.37	1334.82	805.74	27.668
175.00	900.30	924.47	559.56	25.733	255.00	1310.50	1340.01	808.85	27.688
176.00	905.43	929.66	562.68	25.762	256.00	1315.63	1345.21	811.97	27.709
177.00	910.56	934.86	565.80	25.792	257.00	1320.75	1350.40	815.09	27.729
178.00	915.69	940.05	568.91	25.821	258.00	1325.88	1355.60	818.20	27.749
179.00	920.82	945.25	572.03	25.850	259.00	1331.01	1360.79	821.32	27.769
180.00	925.94	950.44	575.15	25.879	260.00	1336.13	1365.98	824.43	27.789
181.00	931.07	955.64	578.26	25.908	261.00	1341.26	1371.18	827.55	27.809
182.00	936.20	960.83	581.38	25.937	262.00	1346.39	1376.37	830.66	27.829
183.00	941.33	966.03	584.50	25.965	263.00	1351.51	1381.56	833.78	27.849
184.00	946.46	971.22	587.61	25.993	264.00	1356.64	1386.76	836.90	27.868
185.00	951.59	976.42	590.73	26.021	265.00	1361.77	1391.95	840.01	27.888
186.00	956.71	981.61	593.85	26.049	266.00	1366.89	1397.14	843.13	27.908
187.00	961.84	986.81	596.96	26.077	267.00	1372.02	1402.34	846.24	27.927
188.00	966.97	992.00	600.08	26.105	268.00	1377.15	1407.53	849.36	27.947
189.00	972.10	997.20	603.19	26.133	269.00	1382.27	1412.73	852.48	27.966
190.00	977.23	1002.39	606.31	26.160	270.00	1387.40	1417.92	855.59	27.985
191.00	982.35	1007.59	609.43	26.187	271.00	1392.53	1423.11	858.71	28.004
192.00	987.48	1012.78	612.54	26.214	272.00	1397.65	1428.31	861.82	28.024
193.00	992.61	1017.98	615.66	26.241	273.00	1402.78	1433.50	864.94	28.043
194.00	997.74	1023.17	618.78	26.268	274.00	1407.91	1438.69	868.05	28.062
195.00	1002.87	1028.37	621.89	26.295	275.00	1413.03	1443.89	871.17	28.081
196.00	1007.99	1033.56	625.01	26.322	276.00	1418.16	1449.08	874.29	28.099
197.00	1013.12	1038.75	628.13	26.348	277.00	1423.29	1454.27	877.40	28.118
198.00	1018.25	1043.95	631.24	26.374	278.00	1428.41	1459.47	880.52	28.137
199.00	1023.38	1049.14	634.36	26.400	279.00	1433.54	1464.66	883.63	28.155
200.00	1028.51	1054.34	637.47	26.426	280.00	1438.67	1469.85	886.75	28.174
201.00	1033.63	1059.53	640.59	26.452	281.00	1443.79	1475.05	889.86	28.193
202.00	1038.76	1064.73	643.71	26.478	282.00	1448.92	1480.24	892.98	28.211
203.00	1043.89	1069.92	646.82	26.504	283.00	1454.04	1485.44	896.10	28.229
204.00	1049.02	1075.12	649.94	26.529	284.00	1459.17	1490.63	899.21	28.248
205.00	1054.14	1080.31	653.06	26.555	285.00	1464.30	1495.82	902.33	28.266
206.00	1059.27	1085.51	656.17	26.580	286.00	1469.42	1501.02	905.44	28.284
207.00	1064.40	1090.70	659.29	26.605	287.00	1474.55	1506.21	908.56	28.302
208.00	1069.53	1095.89	662.40	26.630	288.00	1479.68	1511.40	911.67	28.320
209.00	1074.65	1101.09	665.52	26.655	289.00	1484.80	1516.60	914.79	28.338
210.00	1079.78	1106.28	668.64	26.680	290.00	1489.93	1521.79	917.90	28.356
211.00	1084.91	1111.48	671.75	26.705	291.00	1495.06	1526.98	921.02	28.374
212.00	1090.04	1116.67	674.87	26.729	292.00	1500.18	1532.18	924.14	28.392
213.00	1095.16	1121.87	677.98	26.754	293.00	1505.31	1537.37	927.25	28.410
214.00	1100.29	1127.06	681.10	26.778	294.00	1510.43	1542.56	930.37	28.427
215.00	1105.42	1132.25	684.22	26.802	295.00	1515.56	1547.76	933.48	28.445
216.00	1110.55	1137.45	687.33	26.826	296.00	1520.69	1552.95	936.60	28.463
217.00	1115.67	1142.64	690.45	26.850	297.00	1525.81	1558.14	939.71	28.480
218.00	1120.80	1147.84	693.56	26.874	298.00	1530.94	1563.34	942.83	28.498
219.00	1125.93	1153.03	696.68	26.898	299.00	1536.07	1568.53	945.95	28.515
220.00	1131.06	1158.23	699.80	26.922	300.00	1541.19	1573.72	949.06	28.532

5.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	6.60	8.05	4.70	2.173
4.00	6.99	10.66	7.11	2.942
5.00	7.71	14.53	10.62	3.820
6.00	9.59	21.17	16.31	5.016
7.00	16.74	33.96	25.48	6.989
8.00	23.74	43.29	31.26	8.239
9.00	29.63	50.81	35.80	9.126
10.00	35.01	57.59	39.86	9.841
11.00	40.08	63.96	43.66	10.448
12.00	44.95	70.07	47.30	10.980
13.00	49.69	76.01	50.83	11.455
14.00	54.33	81.82	54.30	11.886
15.00	58.89	87.54	57.70	12.280
16.00	63.39	93.18	61.06	12.645
17.00	67.84	98.77	64.39	12.983
18.00	72.26	104.30	67.70	13.300
19.00	76.63	109.80	70.98	13.597
20.00	80.99	115.27	74.24	13.878
21.00	85.31	120.71	77.49	14.143
22.00	89.62	126.13	80.72	14.395
23.00	93.91	131.52	83.95	14.635
24.00	98.18	136.90	87.16	14.864
25.00	102.44	142.27	90.37	15.083
26.00	106.69	147.62	93.57	15.293
27.00	110.93	152.96	96.76	15.494
28.00	115.16	158.29	99.94	15.688
29.00	119.38	163.61	103.13	15.875
30.00	123.59	168.92	106.30	16.055
31.00	127.79	174.22	109.48	16.229
32.00	131.99	179.52	112.65	16.397
33.00	136.19	184.81	115.81	16.560
34.00	140.37	190.09	118.98	16.717
35.00	144.56	195.37	122.14	16.871
36.00	148.73	200.65	125.29	17.019
37.00	152.91	205.92	128.45	17.164
38.00	157.08	211.19	131.60	17.304
39.00	161.25	216.45	134.75	17.441
40.00	165.41	221.71	137.90	17.574
41.00	169.57	226.96	141.05	17.704
42.00	173.73	232.22	144.20	17.830
43.00	177.89	237.47	147.34	17.954
44.00	182.04	242.72	150.49	18.074
45.00	186.19	247.96	153.63	18.192
46.00	190.34	253.20	156.77	18.308
47.00	194.49	258.45	159.91	18.420
48.00	198.63	263.69	163.05	18.531
49.00	202.78	268.92	166.19	18.639
50.00	206.92	274.16	169.33	18.744
51.00	211.06	279.39	172.46	18.848
52.00	215.20	284.62	175.60	18.950
53.00	219.33	289.85	178.73	19.049
54.00	223.47	295.08	181.87	19.147
55.00	227.60	300.31	185.00	19.243
56.00	231.74	305.54	188.13	19.337
57.00	235.87	310.76	191.26	19.430
58.00	240.00	315.99	194.40	19.520
59.00	244.13	321.21	197.53	19.610
60.00	248.26	326.44	200.66	19.697
61.00	252.39	331.66	203.79	19.784
62.00	256.52	336.88	206.92	19.869
63.00	260.64	342.10	210.05	19.952
64.00	264.77	347.32	213.18	20.034
65.00	268.89	352.53	216.30	20.115
66.00	273.02	357.75	219.43	20.195
67.00	277.14	362.97	222.56	20.273
68.00	281.26	368.18	225.69	20.351
69.00	285.39	373.40	228.81	20.427
70.00	289.51	378.61	231.94	20.502
71.00	293.63	383.83	235.06	20.576
72.00	297.75	389.04	238.19	20.649
73.00	301.87	394.25	241.32	20.721
74.00	305.99	399.47	244.44	20.792
75.00	310.11	404.68	247.57	20.861
76.00	314.23	409.89	250.69	20.931
77.00	318.34	415.10	253.82	20.999
78.00	322.46	420.31	256.94	21.066
79.00	326.58	425.52	260.06	21.132
80.00	330.70	430.73	263.19	21.198
81.00	334.81	435.94	266.31	21.262
82.00	338.93	441.15	269.43	21.326
83.00	343.04	446.36	272.56	21.389
84.00	347.16	451.56	275.68	21.452
85.00	351.27	456.77	278.80	21.513
86.00	355.39	461.98	281.93	21.574
87.00	359.50	467.19	285.05	21.635
88.00	363.62	472.39	288.17	21.694
89.00	367.73	477.60	291.29	21.753
90.00	371.84	482.81	294.42	21.811
91.00	375.96	488.01	297.54	21.869
92.00	380.07	493.22	300.66	21.926
93.00	384.18	498.42	303.78	21.982
94.00	388.29	503.63	306.90	22.037
95.00	392.41	508.83	310.02	22.093
96.00	396.52	514.03	313.14	22.147
97.00	400.63	519.24	316.27	22.201
98.00	404.74	524.44	319.39	22.254
99.00	408.85	529.65	322.51	22.307
100.00	412.96	534.85	325.63	22.359
101.00	417.07	540.05	328.75	22.411
102.00	421.18	545.26	331.87	22.462
103.00	425.29	550.46	334.99	22.513
104.00	429.40	555.66	338.11	22.564
105.00	433.51	560.86	341.23	22.613
106.00	437.62	566.07	344.35	22.663
107.00	441.73	571.27	347.47	22.711
108.00	445.84	576.47	350.59	22.760
109.00	449.95	581.67	353.71	22.808
110.00	454.06	586.87	356.83	22.855
111.00	458.17	592.07	359.95	22.902
112.00	462.28	597.28	363.07	22.949
113.00	466.39	602.48	366.19	22.995
114.00	470.49	607.68	369.31	23.041
115.00	474.60	612.88	372.43	23.086
116.00	478.71	618.08	375.55	23.132
117.00	482.82	623.28	378.67	23.176
118.00	486.93	628.48	381.78	23.220
119.00	491.03	633.68	384.90	23.264
120.00	495.14	638.88	388.02	23.308
121.00	499.25	644.08	391.14	23.351
122.00	503.36	649.28	394.26	23.394
123.00	507.46	654.48	397.38	23.436
124.00	511.57	659.68	400.50	23.478
125.00	515.68	664.88	403.62	23.520
126.00	519.78	670.08	406.74	23.561
127.00	523.89	675.28	409.85	23.603
128.00	528.00	680.48	412.97	23.643
129.00	532.10	685.67	416.09	23.684
130.00	536.21	690.87	419.21	23.724
131.00	540.32	696.07	422.33	23.764
132.00	544.42	701.27	425.45	23.803
133.00	548.53	706.47	428.56	23.843
134.00	552.64	711.67	431.68	23.882
135.00	556.74	716.87	434.80	23.920
136.00	560.85	722.07	437.92	23.959
137.00	564.95	727.26	441.04	23.997
138.00	569.06	732.46	444.15	24.034
139.00	573.16	737.66	447.27	24.072
140.00	577.27	742.86	450.39	24.109

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	581.38	748.06	453.51	24.146	221.00	909.66	1163.73	702.86	26.481
142.00	585.48	753.25	456.63	24.183	222.00	913.76	1168.92	705.98	26.505
143.00	589.59	758.45	459.74	24.219	223.00	917.86	1174.12	709.09	26.528
144.00	593.69	763.65	462.86	24.256	224.00	921.97	1179.31	712.21	26.551
145.00	597.80	768.85	465.98	24.292	225.00	926.07	1184.51	715.33	26.575
146.00	601.90	774.04	469.10	24.327	226.00	930.17	1189.70	718.44	26.598
147.00	606.01	779.24	472.22	24.363	227.00	934.27	1194.90	721.56	26.620
148.00	610.11	784.44	475.33	24.398	228.00	938.37	1200.09	724.68	26.643
149.00	614.22	789.64	478.45	24.433	229.00	942.48	1205.29	727.79	26.666
150.00	618.32	794.83	481.57	24.468	230.00	946.58	1210.48	730.91	26.689
151.00	622.43	800.03	484.69	24.502	231.00	950.68	1215.68	734.02	26.711
152.00	626.53	805.23	487.80	24.537	232.00	954.78	1220.87	737.14	26.734
153.00	630.64	810.43	490.92	24.571	233.00	958.88	1226.06	740.26	26.756
154.00	634.74	815.62	494.04	24.605	234.00	962.99	1231.26	743.37	26.778
155.00	638.85	820.82	497.16	24.638	235.00	967.09	1236.45	746.49	26.800
156.00	642.95	826.02	500.27	24.672	236.00	971.19	1241.65	749.61	26.822
157.00	647.05	831.21	503.39	24.705	237.00	975.29	1246.84	752.72	26.844
158.00	651.16	836.41	506.51	24.738	238.00	979.39	1252.04	755.84	26.866
159.00	655.26	841.61	509.63	24.771	239.00	983.50	1257.23	758.95	26.888
160.00	659.37	846.80	512.74	24.803	240.00	987.60	1262.42	762.07	26.910
161.00	663.47	852.00	515.86	24.836	241.00	991.70	1267.62	765.19	26.931
162.00	667.58	857.20	518.98	24.868	242.00	995.80	1272.81	768.30	26.953
163.00	671.68	862.39	522.09	24.900	243.00	999.90	1278.01	771.42	26.974
164.00	675.78	867.59	525.21	24.932	244.00	1004.01	1283.20	774.53	26.996
165.00	679.89	872.79	528.33	24.963	245.00	1008.11	1288.40	777.65	27.017
166.00	683.99	877.98	531.45	24.995	246.00	1012.21	1293.59	780.77	27.038
167.00	688.10	883.18	534.56	25.026	247.00	1016.31	1298.78	783.88	27.059
168.00	692.20	888.38	537.68	25.057	248.00	1020.41	1303.98	787.00	27.080
169.00	696.30	893.57	540.80	25.088	249.00	1024.51	1309.17	790.11	27.101
170.00	700.41	898.77	543.91	25.118	250.00	1028.62	1314.37	793.23	27.122
171.00	704.51	903.96	547.03	25.149	251.00	1032.72	1319.56	796.35	27.143
172.00	708.62	909.16	550.15	25.179	252.00	1036.82	1324.76	799.46	27.163
173.00	712.72	914.36	553.27	25.209	253.00	1040.92	1329.95	802.58	27.184
174.00	716.82	919.55	556.38	25.239	254.00	1045.02	1335.14	805.69	27.204
175.00	720.93	924.75	559.50	25.269	255.00	1049.13	1340.34	808.81	27.225
176.00	725.03	929.95	562.62	25.298	256.00	1053.23	1345.53	811.93	27.245
177.00	729.13	935.14	565.73	25.328	257.00	1057.33	1350.73	815.04	27.265
178.00	733.24	940.34	568.85	25.357	258.00	1061.43	1355.92	818.16	27.285
179.00	737.34	945.53	571.97	25.386	259.00	1065.53	1361.11	821.27	27.305
180.00	741.44	950.73	575.08	25.415	260.00	1069.63	1366.31	824.39	27.326
181.00	745.55	955.92	578.20	25.444	261.00	1073.74	1371.50	827.51	27.345
182.00	749.65	961.12	581.32	25.473	262.00	1077.84	1376.70	830.62	27.365
183.00	753.75	966.32	584.43	25.501	263.00	1081.94	1381.89	833.74	27.385
184.00	757.86	971.51	587.55	25.529	264.00	1086.04	1387.08	836.85	27.405
185.00	761.96	976.71	590.67	25.558	265.00	1090.14	1392.28	839.97	27.424
186.00	766.06	981.90	593.79	25.586	266.00	1094.24	1397.47	843.09	27.444
187.00	770.17	987.10	596.90	25.613	267.00	1098.35	1402.67	846.20	27.463
188.00	774.27	992.29	600.02	25.641	268.00	1102.45	1407.86	849.32	27.483
189.00	778.37	997.49	603.14	25.669	269.00	1106.55	1413.05	852.43	27.502
190.00	782.48	1002.68	606.25	25.696	270.00	1110.65	1418.25	855.55	27.522
191.00	786.58	1007.88	609.37	25.723	271.00	1114.75	1423.44	858.67	27.541
192.00	790.68	1013.08	612.49	25.751	272.00	1118.85	1428.63	861.78	27.560
193.00	794.79	1018.27	615.60	25.778	273.00	1122.95	1433.83	864.90	27.579
194.00	798.89	1023.47	618.72	25.804	274.00	1127.06	1439.02	868.01	27.598
195.00	802.99	1028.66	621.84	25.831	275.00	1131.16	1444.22	871.13	27.617
196.00	807.09	1033.86	624.95	25.858	276.00	1135.26	1449.41	874.24	27.636
197.00	811.20	1039.05	628.07	25.884	277.00	1139.36	1454.60	877.36	27.654
198.00	815.30	1044.25	631.18	25.910	278.00	1143.46	1459.80	880.48	27.673
199.00	819.40	1049.44	634.30	25.937	279.00	1147.56	1464.99	883.59	27.692
200.00	823.51	1054.64	637.42	25.963	280.00	1151.66	1470.19	886.71	27.710
201.00	827.61	1059.83	640.53	25.989	281.00	1155.77	1475.38	889.82	27.729
202.00	831.71	1065.03	643.65	26.014	282.00	1159.87	1480.57	892.94	27.747
203.00	835.81	1070.22	646.77	26.040	283.00	1163.97	1485.77	896.06	27.766
204.00	839.92	1075.42	649.88	26.066	284.00	1168.07	1490.96	899.17	27.784
205.00	844.02	1080.61	653.00	26.091	285.00	1172.17	1496.15	902.29	27.802
206.00	848.12	1085.81	656.12	26.116	286.00	1176.27	1501.35	905.40	27.821
207.00	852.22	1091.00	659.23	26.141	287.00	1180.37	1506.54	908.52	27.839
208.00	856.33	1096.20	662.35	26.166	288.00	1184.48	1511.74	911.63	27.857
209.00	860.43	1101.39	665.47	26.191	289.00	1188.58	1516.93	914.75	27.875
210.00	864.53	1106.59	668.58	26.216	290.00	1192.68	1522.12	917.87	27.893
211.00	868.63	1111.78	671.70	26.241	291.00	1196.78	1527.32	920.98	27.911
212.00	872.74	1116.98	674.82	26.265	292.00	1200.88	1532.51	924.10	27.928
213.00	876.84	1122.17	677.93	26.290	293.00	1204.98	1537.70	927.21	27.946
214.00	880.94	1127.37	681.05	26.314	294.00	1209.08	1542.90	930.33	27.964
215.00	885.04	1132.56	684.16	26.338	295.00	1213.18	1548.09	933.44	27.981
216.00	889.15	1137.76	687.28	26.362	296.00	1217.29	1553.28	936.56	27.999
217.00	893.25	1142.95	690.40	26.386	297.00	1221.39	1558.48	939.68	28.017
218.00	897.35	1148.15	693.51	26.410	298.00	1225.49	1563.67	942.79	28.034
219.00	901.45	1153.34	696.63	26.434	299.00	1229.59	1568.87	945.91	28.051
220.00	905.56	1158.54	699.75	26.458	300.00	1233.69	1574.06	949.02	28.069

6.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	6.53	8.63	4.66	2.145
4.00	6.88	11.17	6.98	2.894
5.00	7.50	14.82	10.26	3.726
6.00	8.82	20.47	15.11	4.745
7.00	12.78	30.40	22.63	6.269
8.00	18.67	40.65	29.30	7.643
9.00	23.81	48.76	34.29	8.600
10.00	28.45	55.90	38.61	9.353
11.00	32.80	62.52	42.58	9.984
12.00	36.97	68.82	46.34	10.532
13.00	41.00	74.90	49.97	11.019
14.00	44.93	80.83	53.51	11.458
15.00	48.79	86.64	56.98	11.859
16.00	52.60	92.37	60.39	12.229
17.00	56.35	98.02	63.76	12.572
18.00	60.07	103.62	67.10	12.892
19.00	63.75	109.18	70.42	13.192
20.00	67.41	114.70	73.71	13.475
21.00	71.05	120.18	76.98	13.743
22.00	74.67	125.64	80.24	13.997
23.00	78.27	131.07	83.49	14.238
24.00	81.85	136.48	86.72	14.469
25.00	85.42	141.88	89.95	14.689
26.00	88.99	147.26	93.16	14.900
27.00	92.54	152.63	96.37	15.102
28.00	96.08	157.98	99.57	15.297
29.00	99.61	163.32	102.76	15.484
30.00	103.14	168.66	105.95	15.665
31.00	106.65	173.98	109.14	15.840
32.00	110.17	179.29	112.32	16.009
33.00	113.68	184.60	115.49	16.172
34.00	117.18	189.90	118.66	16.330
35.00	120.68	195.20	121.83	16.484
36.00	124.17	200.49	125.00	16.633
37.00	127.66	205.77	128.16	16.778
38.00	131.14	211.05	131.32	16.918
39.00	134.63	216.33	134.48	17.055
40.00	138.11	221.60	137.64	17.189
41.00	141.58	226.87	140.79	17.319
42.00	145.06	232.13	143.95	17.446
43.00	148.53	237.40	147.10	17.570
44.00	152.00	242.65	150.24	17.690
45.00	155.46	247.91	153.39	17.809
46.00	158.93	253.16	156.54	17.924
47.00	162.39	258.41	159.68	18.037
48.00	165.85	263.66	162.83	18.147
49.00	169.31	268.90	165.97	18.256
50.00	172.77	274.15	169.11	18.361
51.00	176.22	279.39	172.25	18.465
52.00	179.68	284.63	175.39	18.567
53.00	183.13	289.87	178.53	18.667
54.00	186.58	295.10	181.67	18.765
55.00	190.03	300.34	184.80	18.861
56.00	193.48	305.57	187.94	18.955
57.00	196.93	310.80	191.08	19.048
58.00	200.38	316.03	194.21	19.139
59.00	203.83	321.26	197.34	19.228
60.00	207.27	326.49	200.48	19.316
61.00	210.72	331.72	203.61	19.402
62.00	214.16	336.94	206.74	19.487
63.00	217.60	342.17	209.87	19.571
64.00	221.04	347.39	213.01	19.653
65.00	224.49	352.62	216.14	19.734
66.00	227.93	357.84	219.27	19.814
67.00	231.37	363.06	222.40	19.892
68.00	234.81	368.28	225.53	19.970
69.00	238.24	373.50	228.65	20.046
70.00	241.68	378.72	231.78	20.121
71.00	245.12	383.94	234.91	20.195
72.00	248.56	389.15	238.04	20.268
73.00	251.99	394.37	241.17	20.340
74.00	255.43	399.59	244.29	20.411
75.00	258.86	404.80	247.42	20.481
76.00	262.30	410.02	250.55	20.550
77.00	265.73	415.23	253.67	20.618
78.00	269.17	420.44	256.80	20.685
79.00	272.60	425.66	259.93	20.752
80.00	276.03	430.87	263.05	20.817
81.00	279.47	436.08	266.18	20.882
82.00	282.90	441.29	269.30	20.946
83.00	286.33	446.51	272.43	21.009
84.00	289.76	451.72	275.55	21.072
85.00	293.20	456.93	278.67	21.133
86.00	296.63	462.14	281.80	21.194
87.00	300.06	467.35	284.92	21.254
88.00	303.49	472.56	288.05	21.314
89.00	306.92	477.77	291.17	21.373
90.00	310.35	482.97	294.29	21.431
91.00	313.78	488.18	297.42	21.489
92.00	317.21	493.39	300.54	21.546
93.00	320.64	498.60	303.66	21.602
94.00	324.06	503.80	306.78	21.658
95.00	327.49	509.01	309.91	21.713
96.00	330.92	514.22	313.03	21.767
97.00	334.35	519.42	316.15	21.821
98.00	337.78	524.63	319.27	21.874
99.00	341.20	529.84	322.40	21.927
100.00	344.63	535.04	325.52	21.980
101.00	348.06	540.25	328.64	22.031
102.00	351.49	545.45	331.76	22.083
103.00	354.91	550.66	334.88	22.133
104.00	358.34	555.86	338.00	22.184
105.00	361.77	561.07	341.12	22.234
106.00	365.19	566.27	344.25	22.283
107.00	368.62	571.47	347.37	22.332
108.00	372.04	576.68	350.49	22.380
109.00	375.47	581.88	353.61	22.428
110.00	378.90	587.08	356.73	22.476
111.00	382.32	592.29	359.85	22.523
112.00	385.75	597.49	362.97	22.569
113.00	389.17	602.69	366.09	22.616
114.00	392.60	607.90	369.21	22.661
115.00	396.02	613.10	372.33	22.707
116.00	399.45	618.30	375.45	22.752
117.00	402.87	623.50	378.57	22.797
118.00	406.29	628.70	381.69	22.841
119.00	409.72	633.91	384.81	22.885
120.00	413.14	639.11	387.93	22.928
121.00	416.57	644.31	391.05	22.971
122.00	419.99	649.51	394.17	23.014
123.00	423.41	654.71	397.29	23.057
124.00	426.84	659.91	400.41	23.099
125.00	430.26	665.11	403.53	23.141
126.00	433.69	670.31	406.65	23.182
127.00	437.11	675.51	409.77	23.223
128.00	440.53	680.71	412.89	23.264
129.00	443.96	685.91	416.00	23.304
130.00	447.38	691.11	419.12	23.345
131.00	450.80	696.31	422.24	23.384
132.00	454.22	701.51	425.36	23.424
133.00	457.65	706.71	428.48	23.463
134.00	461.07	711.91	431.60	23.502
135.00	464.49	717.11	434.72	23.541
136.00	467.92	722.31	437.84	23.579
137.00	471.34	727.51	440.96	23.617
138.00	474.76	732.71	444.07	23.655
139.00	478.18	737.91	447.19	23.693
140.00	481.60	743.11	450.31	23.730

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	485.03	748.31	453.43	23.767	221.00	758.64	1164.04	702.81	26.102
142.00	488.45	753.51	456.55	23.804	222.00	762.06	1169.23	705.93	26.126
143.00	491.87	758.71	459.67	23.840	223.00	765.48	1174.43	709.04	26.149
144.00	495.29	763.91	462.79	23.876	224.00	768.90	1179.62	712.16	26.172
145.00	498.71	769.11	465.90	23.912	225.00	772.32	1184.82	715.28	26.196
146.00	502.14	774.30	469.02	23.948	226.00	775.74	1190.01	718.39	26.219
147.00	505.56	779.50	472.14	23.984	227.00	779.15	1195.21	721.51	26.242
148.00	508.98	784.70	475.26	24.019	228.00	782.57	1200.40	724.63	26.264
149.00	512.40	789.90	478.38	24.054	229.00	785.99	1205.60	727.74	26.287
150.00	515.82	795.10	481.49	24.089	230.00	789.41	1210.79	730.86	26.310
151.00	519.24	800.30	484.61	24.123	231.00	792.83	1215.99	733.98	26.332
152.00	522.67	805.49	487.73	24.157	232.00	796.25	1221.18	737.09	26.355
153.00	526.09	810.69	490.85	24.192	233.00	799.67	1226.38	740.21	26.377
154.00	529.51	815.89	493.97	24.225	234.00	803.09	1231.57	743.32	26.399
155.00	532.93	821.09	497.08	24.259	235.00	806.50	1236.77	746.44	26.421
156.00	536.35	826.29	500.20	24.292	236.00	809.92	1241.96	749.56	26.444
157.00	539.77	831.48	503.32	24.326	237.00	813.34	1247.16	752.67	26.465
158.00	543.19	836.68	506.44	24.359	238.00	816.76	1252.35	755.79	26.487
159.00	546.61	841.88	509.56	24.391	239.00	820.18	1257.55	758.91	26.509
160.00	550.04	847.08	512.67	24.424	240.00	823.60	1262.74	762.02	26.531
161.00	553.46	852.27	515.79	24.456	241.00	827.02	1267.94	765.14	26.552
162.00	556.88	857.47	518.91	24.489	242.00	830.44	1273.13	768.26	26.574
163.00	560.30	862.67	522.03	24.521	243.00	833.85	1278.33	771.37	26.595
164.00	563.72	867.87	525.14	24.552	244.00	837.27	1283.52	774.49	26.617
165.00	567.14	873.06	528.26	24.584	245.00	840.69	1288.72	777.60	26.638
166.00	570.56	878.26	531.38	24.615	246.00	844.11	1293.91	780.72	26.659
167.00	573.98	883.46	534.50	24.647	247.00	847.53	1299.10	783.84	26.680
168.00	577.40	888.65	537.61	24.678	248.00	850.95	1304.30	786.95	26.701
169.00	580.82	893.85	540.73	24.708	249.00	854.36	1309.49	790.07	26.722
170.00	584.24	899.05	543.85	24.739	250.00	857.78	1314.69	793.19	26.743
171.00	587.66	904.25	546.97	24.770	251.00	861.20	1319.88	796.30	26.764
172.00	591.08	909.44	550.08	24.800	252.00	864.62	1325.08	799.42	26.784
173.00	594.50	914.64	553.20	24.830	253.00	868.04	1330.27	802.53	26.805
174.00	597.92	919.84	556.32	24.860	254.00	871.46	1335.47	805.65	26.825
175.00	601.34	925.03	559.44	24.890	255.00	874.88	1340.66	808.77	26.846
176.00	604.76	930.23	562.55	24.919	256.00	878.29	1345.85	811.88	26.866
177.00	608.18	935.43	565.67	24.949	257.00	881.71	1351.05	815.00	26.886
178.00	611.60	940.62	568.79	24.978	258.00	885.13	1356.24	818.11	26.907
179.00	615.02	945.82	571.90	25.007	259.00	888.55	1361.44	821.23	26.927
180.00	618.44	951.02	575.02	25.036	260.00	891.97	1366.63	824.35	26.947
181.00	621.86	956.21	578.14	25.065	261.00	895.39	1371.83	827.46	26.967
182.00	625.28	961.41	581.26	25.094	262.00	898.80	1377.02	830.58	26.986
183.00	628.70	966.60	584.37	25.122	263.00	902.22	1382.22	833.70	27.006
184.00	632.12	971.80	587.49	25.150	264.00	905.64	1387.41	836.81	27.026
185.00	635.54	977.00	590.61	25.179	265.00	909.06	1392.60	839.93	27.046
186.00	638.96	982.19	593.72	25.207	266.00	912.48	1397.80	843.04	27.065
187.00	642.38	987.39	596.84	25.234	267.00	915.89	1402.99	846.16	27.085
188.00	645.80	992.59	599.96	25.262	268.00	919.31	1408.19	849.28	27.104
189.00	649.22	997.78	603.08	25.290	269.00	922.73	1413.38	852.39	27.123
190.00	652.64	1002.98	606.19	25.317	270.00	926.15	1418.58	855.51	27.143
191.00	656.06	1008.17	609.31	25.344	271.00	929.57	1423.77	858.62	27.162
192.00	659.48	1013.37	612.43	25.372	272.00	932.99	1428.96	861.74	27.181
193.00	662.90	1018.57	615.54	25.399	273.00	936.40	1434.16	864.86	27.200
194.00	666.32	1023.76	618.66	25.425	274.00	939.82	1439.35	867.97	27.219
195.00	669.74	1028.96	621.78	25.452	275.00	943.24	1444.55	871.09	27.238
196.00	673.16	1034.15	624.89	25.479	276.00	946.66	1449.74	874.20	27.257
197.00	676.58	1039.35	628.01	25.505	277.00	950.08	1454.93	877.32	27.276
198.00	680.00	1044.55	631.13	25.531	278.00	953.49	1460.13	880.44	27.294
199.00	683.42	1049.74	634.25	25.558	279.00	956.91	1465.32	883.55	27.313
200.00	686.84	1054.94	637.36	25.584	280.00	960.33	1470.52	886.67	27.332
201.00	690.26	1060.13	640.48	25.610	281.00	963.75	1475.71	889.78	27.350
202.00	693.68	1065.33	643.60	25.635	282.00	967.17	1480.90	892.90	27.369
203.00	697.10	1070.52	646.71	25.661	283.00	970.59	1486.10	896.02	27.387
204.00	700.52	1075.72	649.83	25.687	284.00	974.00	1491.29	899.13	27.405
205.00	703.94	1080.91	652.95	25.712	285.00	977.42	1496.49	902.25	27.423
206.00	707.36	1086.11	656.06	25.737	286.00	980.84	1501.68	905.36	27.442
207.00	710.77	1091.31	659.18	25.762	287.00	984.26	1506.87	908.48	27.460
208.00	714.19	1096.50	662.30	25.787	288.00	987.68	1512.07	911.60	27.478
209.00	717.61	1101.70	665.41	25.812	289.00	991.09	1517.26	914.71	27.496
210.00	721.03	1106.89	668.53	25.837	290.00	994.51	1522.46	917.83	27.514
211.00	724.45	1112.09	671.65	25.862	291.00	997.93	1527.65	920.94	27.532
212.00	727.87	1117.28	674.76	25.886	292.00	1001.35	1532.84	924.06	27.550
213.00	731.29	1122.48	677.88	25.911	293.00	1004.77	1538.04	927.17	27.567
214.00	734.71	1127.67	681.00	25.935	294.00	1008.18	1543.23	930.29	27.585
215.00	738.13	1132.87	684.11	25.959	295.00	1011.60	1548.43	933.41	27.603
216.00	741.55	1138.06	687.23	25.983	296.00	1015.02	1553.62	936.52	27.620
217.00	744.97	1143.26	690.35	26.007	297.00	1018.44	1558.81	939.64	27.638
218.00	748.38	1148.45	693.46	26.031	298.00	1021.85	1564.01	942.75	27.655
219.00	751.80	1153.65	696.58	26.055	299.00	1025.27	1569.20	945.87	27.673
220.00	755.22	1158.84	699.69	26.079	300.00	1028.69	1574.40	948.99	27.690

7.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	6.47	9.21	4.62	2.119
4.00	6.79	11.69	6.87	2.850
5.00	7.33	15.18	9.98	3.648
6.00	8.37	20.28	14.34	4.568
7.00	10.83	28.21	20.53	5.787
8.00	15.32	38.23	27.37	7.126
9.00	19.79	46.82	32.79	8.140
10.00	23.87	54.29	37.36	8.928
11.00	27.68	61.15	41.51	9.581
12.00	31.33	67.62	45.40	10.145
13.00	34.84	73.84	49.13	10.643
14.00	38.27	79.88	52.74	11.090
15.00	41.62	85.79	56.26	11.498
16.00	44.92	91.59	59.73	11.873
17.00	48.18	97.32	63.15	12.220
18.00	51.39	102.98	66.52	12.543
19.00	54.58	108.58	69.87	12.847
20.00	57.75	114.15	73.19	13.132
21.00	60.89	119.68	76.49	13.402
22.00	64.01	125.17	79.77	13.657
23.00	67.11	130.64	83.04	13.900
24.00	70.21	136.09	86.29	14.132
25.00	73.29	141.51	89.53	14.354
26.00	76.35	146.92	92.76	14.566
27.00	79.41	152.31	95.98	14.769
28.00	82.46	157.69	99.20	14.965
29.00	85.50	163.05	102.40	15.153
30.00	88.54	168.41	105.60	15.334
31.00	91.57	173.75	108.80	15.510
32.00	94.59	179.08	111.99	15.679
33.00	97.61	184.41	115.18	15.843
34.00	100.62	189.73	118.36	16.002
35.00	103.63	195.04	121.53	16.156
36.00	106.63	200.34	124.71	16.305
37.00	109.63	205.64	127.88	16.450
38.00	112.63	210.93	131.05	16.591
39.00	115.62	216.22	134.21	16.729
40.00	118.61	221.50	137.38	16.862
41.00	121.60	226.78	140.54	16.993
42.00	124.58	232.06	143.69	17.120
43.00	127.56	237.33	146.85	17.244
44.00	130.54	242.60	150.00	17.365
45.00	133.52	247.86	153.16	17.483
46.00	136.50	253.12	156.31	17.599
47.00	139.47	258.38	159.46	17.712
48.00	142.44	263.64	162.61	17.823
49.00	145.41	268.89	165.75	17.931
50.00	148.38	274.14	168.90	18.037
51.00	151.35	279.39	172.04	18.141
52.00	154.31	284.64	175.19	18.243
53.00	157.28	289.88	178.33	18.343
54.00	160.24	295.13	181.47	18.441
55.00	163.20	300.37	184.61	18.537
56.00	166.16	305.61	187.75	18.632
57.00	169.12	310.85	190.89	18.724
58.00	172.08	316.08	194.03	18.815
59.00	175.04	321.32	197.16	18.905
60.00	178.00	326.55	200.30	18.993
61.00	180.95	331.78	203.43	19.079
62.00	183.91	337.01	206.57	19.164
63.00	186.86	342.24	209.70	19.248
64.00	189.82	347.47	212.84	19.330
65.00	192.77	352.70	215.97	19.411
66.00	195.72	357.93	219.10	19.491
67.00	198.67	363.15	222.24	19.570
68.00	201.62	368.38	225.37	19.647
69.00	204.57	373.60	228.50	19.723
70.00	207.52	378.82	231.63	19.799
71.00	210.47	384.05	234.76	19.873
72.00	213.42	389.27	237.89	19.946
73.00	216.37	394.49	241.02	20.018
74.00	219.32	399.71	244.15	20.089
75.00	222.26	404.93	247.28	20.159
76.00	225.21	410.15	250.41	20.228
77.00	228.16	415.36	253.53	20.296
78.00	231.10	420.58	256.66	20.363
79.00	234.05	425.80	259.79	20.430
80.00	236.99	431.01	262.92	20.496
81.00	239.94	436.23	266.04	20.560
82.00	242.88	441.44	269.17	20.624
83.00	245.83	446.66	272.30	20.687
84.00	248.77	451.87	275.42	20.750
85.00	251.71	457.08	278.55	20.812
86.00	254.66	462.30	281.67	20.873
87.00	257.60	467.51	284.80	20.933
88.00	260.54	472.72	287.92	20.992
89.00	263.48	477.93	291.05	21.051
90.00	266.42	483.14	294.17	21.110
91.00	269.36	488.36	297.30	21.167
92.00	272.31	493.57	300.42	21.224
93.00	275.25	498.78	303.54	21.280
94.00	278.19	503.99	306.67	21.336
95.00	281.13	509.19	309.79	21.391
96.00	284.07	514.40	312.92	21.446
97.00	287.01	519.61	316.04	21.500
98.00	289.95	524.82	319.16	21.553
99.00	292.89	530.03	322.29	21.606
100.00	295.83	535.24	325.41	21.658
101.00	298.76	540.44	328.53	21.710
102.00	301.70	545.65	331.65	21.761
103.00	304.64	550.86	334.78	21.812
104.00	307.58	556.06	337.90	21.863
105.00	310.52	561.27	341.02	21.912
106.00	313.46	566.48	344.14	21.962
107.00	316.39	571.68	347.26	22.011
108.00	319.33	576.89	350.39	22.059
109.00	322.27	582.09	353.51	22.107
110.00	325.21	587.30	356.63	22.155
111.00	328.14	592.50	359.75	22.202
112.00	331.08	597.71	362.87	22.248
113.00	334.02	602.91	365.99	22.295
114.00	336.96	608.11	369.11	22.340
115.00	339.89	613.32	372.23	22.386
116.00	342.83	618.52	375.36	22.431
117.00	345.77	623.73	378.48	22.476
118.00	348.70	628.93	381.60	22.520
119.00	351.64	634.13	384.72	22.564
120.00	354.57	639.34	387.84	22.607
121.00	357.51	644.54	390.96	22.651
122.00	360.45	649.74	394.08	22.693
123.00	363.38	654.94	397.20	22.736
124.00	366.32	660.15	400.32	22.778
125.00	369.25	665.35	403.44	22.820
126.00	372.19	670.55	406.56	22.861
127.00	375.12	675.75	409.68	22.902
128.00	378.06	680.95	412.80	22.943
129.00	380.99	686.16	415.92	22.984
130.00	383.93	691.36	419.04	23.024
131.00	386.86	696.56	422.16	23.064
132.00	389.80	701.76	425.28	23.103
133.00	392.73	706.96	428.40	23.142
134.00	395.67	712.16	431.52	23.181
135.00	398.60	717.36	434.64	23.220
136.00	401.54	722.56	437.76	23.258
137.00	404.47	727.76	440.88	23.297
138.00	407.40	732.96	443.99	23.334
139.00	410.34	738.16	447.11	23.372
140.00	413.27	743.36	450.23	23.409

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	416.21	748.56	453.35	23.446	221.00	650.77	1164.35	702.76	25.782
142.00	419.14	753.76	456.47	23.483	222.00	653.70	1169.55	705.88	25.805
143.00	422.07	758.96	459.59	23.519	223.00	656.63	1174.74	708.99	25.829
144.00	425.01	764.16	462.71	23.556	224.00	659.56	1179.94	712.11	25.852
145.00	427.94	769.36	465.83	23.592	225.00	662.50	1185.13	715.23	25.875
146.00	430.88	774.56	468.95	23.627	226.00	665.43	1190.33	718.34	25.898
147.00	433.81	779.76	472.06	23.663	227.00	668.36	1195.52	721.46	25.921
148.00	436.74	784.96	475.18	23.698	228.00	671.29	1200.72	724.58	25.944
149.00	439.68	790.16	478.30	23.733	229.00	674.22	1205.91	727.69	25.967
150.00	442.61	795.36	481.42	23.768	230.00	677.15	1211.11	730.81	25.989
151.00	445.54	800.56	484.54	23.802	231.00	680.08	1216.30	733.93	26.012
152.00	448.48	805.76	487.66	23.837	232.00	683.01	1221.50	737.04	26.034
153.00	451.41	810.96	490.78	23.871	233.00	685.94	1226.69	740.16	26.057
154.00	454.34	816.16	493.89	23.905	234.00	688.87	1231.89	743.28	26.079
155.00	457.28	821.36	497.01	23.938	235.00	691.80	1237.08	746.39	26.101
156.00	460.21	826.55	500.13	23.972	236.00	694.73	1242.28	749.51	26.123
157.00	463.14	831.75	503.25	24.005	237.00	697.66	1247.47	752.63	26.145
158.00	466.07	836.95	506.37	24.038	238.00	700.59	1252.67	755.74	26.167
159.00	469.01	842.15	509.49	24.071	239.00	703.52	1257.87	758.86	26.189
160.00	471.94	847.35	512.60	24.103	240.00	706.45	1263.06	761.98	26.210
161.00	474.87	852.55	515.72	24.136	241.00	709.39	1268.26	765.09	26.232
162.00	477.81	857.75	518.84	24.168	242.00	712.32	1273.45	768.21	26.254
163.00	480.74	862.94	521.96	24.200	243.00	715.25	1278.65	771.33	26.275
164.00	483.67	868.14	525.08	24.232	244.00	718.18	1283.84	774.44	26.296
165.00	486.60	873.34	528.19	24.263	245.00	721.11	1289.04	777.56	26.318
166.00	489.54	878.54	531.31	24.295	246.00	724.04	1294.23	780.67	26.339
167.00	492.47	883.74	534.43	24.326	247.00	726.97	1299.42	783.79	26.360
168.00	495.40	888.93	537.55	24.357	248.00	729.90	1304.62	786.91	26.381
169.00	498.33	894.13	540.67	24.388	249.00	732.83	1309.81	790.02	26.402
170.00	501.27	899.33	543.78	24.419	250.00	735.76	1315.01	793.14	26.423
171.00	504.20	904.53	546.90	24.449	251.00	738.69	1320.20	796.26	26.443
172.00	507.13	909.72	550.02	24.479	252.00	741.62	1325.40	799.37	26.464
173.00	510.06	914.92	553.14	24.509	253.00	744.55	1330.59	802.49	26.484
174.00	513.00	920.12	556.25	24.539	254.00	747.48	1335.79	805.61	26.505
175.00	515.93	925.32	559.37	24.569	255.00	750.41	1340.98	808.72	26.525
176.00	518.86	930.51	562.49	24.599	256.00	753.34	1346.18	811.84	26.546
177.00	521.79	935.71	565.61	24.628	257.00	756.27	1351.37	814.95	26.566
178.00	524.72	940.91	568.73	24.658	258.00	759.20	1356.57	818.07	26.586
179.00	527.66	946.11	571.84	24.687	259.00	762.13	1361.76	821.19	26.606
180.00	530.59	951.30	574.96	24.716	260.00	765.06	1366.96	824.30	26.626
181.00	533.52	956.50	578.08	24.744	261.00	767.99	1372.15	827.42	26.646
182.00	536.45	961.70	581.20	24.773	262.00	770.92	1377.35	830.54	26.666
183.00	539.38	966.89	584.31	24.802	263.00	773.85	1382.54	833.65	26.686
184.00	542.32	972.09	587.43	24.830	264.00	776.78	1387.74	836.77	26.706
185.00	545.25	977.29	590.55	24.858	265.00	779.71	1392.93	839.88	26.725
186.00	548.18	982.48	593.67	24.886	266.00	782.64	1398.12	843.00	26.745
187.00	551.11	987.68	596.78	24.914	267.00	785.57	1403.32	846.12	26.764
188.00	554.04	992.88	599.90	24.942	268.00	788.50	1408.51	849.23	26.784
189.00	556.97	998.08	603.02	24.969	269.00	791.43	1413.71	852.35	26.803
190.00	559.91	1003.27	606.13	24.997	270.00	794.36	1418.90	855.47	26.822
191.00	562.84	1008.47	609.25	25.024	271.00	797.29	1424.10	858.58	26.841
192.00	565.77	1013.67	612.37	25.051	272.00	800.22	1429.29	861.70	26.861
193.00	568.70	1018.86	615.49	25.078	273.00	803.15	1434.49	864.81	26.880
194.00	571.63	1024.06	618.60	25.105	274.00	806.08	1439.68	867.93	26.899
195.00	574.56	1029.25	621.72	25.132	275.00	809.01	1444.88	871.05	26.918
196.00	577.49	1034.45	624.84	25.158	276.00	811.94	1450.07	874.16	26.936
197.00	580.43	1039.65	627.95	25.185	277.00	814.87	1455.26	877.28	26.955
198.00	583.36	1044.84	631.07	25.211	278.00	817.80	1460.46	880.40	26.974
199.00	586.29	1050.04	634.19	25.237	279.00	820.73	1465.65	883.51	26.993
200.00	589.22	1055.24	637.31	25.263	280.00	823.66	1470.85	886.63	27.011
201.00	592.15	1060.43	640.42	25.289	281.00	826.59	1476.04	889.74	27.030
202.00	595.08	1065.63	643.54	25.315	282.00	829.52	1481.24	892.86	27.048
203.00	598.01	1070.82	646.66	25.341	283.00	832.45	1486.43	895.98	27.067
204.00	600.95	1076.02	649.77	25.366	284.00	835.38	1491.62	899.09	27.085
205.00	603.88	1081.22	652.89	25.391	285.00	838.31	1496.82	902.21	27.103
206.00	606.81	1086.41	656.01	25.417	286.00	841.24	1502.01	905.32	27.121
207.00	609.74	1091.61	659.13	25.442	287.00	844.17	1507.21	908.44	27.139
208.00	612.67	1096.80	662.24	25.467	288.00	847.10	1512.40	911.56	27.158
209.00	615.60	1102.00	665.36	25.492	289.00	850.03	1517.60	914.67	27.176
210.00	618.53	1107.20	668.48	25.517	290.00	852.96	1522.79	917.79	27.193
211.00	621.46	1112.39	671.59	25.541	291.00	855.89	1527.98	920.90	27.211
212.00	624.39	1117.59	674.71	25.566	292.00	858.82	1533.18	924.02	27.229
213.00	627.33	1122.78	677.83	25.590	293.00	861.75	1538.37	927.14	27.247
214.00	630.26	1127.98	680.94	25.615	294.00	864.68	1543.57	930.25	27.265
215.00	633.19	1133.18	684.06	25.639	295.00	867.61	1548.76	933.37	27.282
216.00	636.12	1138.37	687.18	25.663	296.00	870.54	1553.96	936.48	27.300
217.00	639.05	1143.57	690.29	25.687	297.00	873.47	1559.15	939.60	27.317
218.00	641.98	1148.76	693.41	25.711	298.00	876.40	1564.34	942.72	27.335
219.00	644.91	1153.96	696.53	25.735	299.00	879.33	1569.54	945.83	27.352
220.00	647.84	1159.15	699.64	25.758	300.00	882.26	1574.73	948.95	27.370

8.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	6.41	9.79	4.59	2.094
4.00	6.70	12.21	6.78	2.810
5.00	7.19	15.58	9.75	3.580
6.00	8.05	20.31	13.78	4.435
7.00	9.80	27.08	19.14	5.478
8.00	13.10	36.22	25.61	6.696
9.00	16.91	45.03	31.32	7.736
10.00	20.52	52.78	36.14	8.552
11.00	23.92	59.84	40.46	9.226
12.00	27.15	66.48	44.47	9.804
13.00	30.27	72.83	48.29	10.312
14.00	33.31	78.98	51.97	10.768
15.00	36.28	84.97	55.56	11.181
16.00	39.20	90.85	59.08	11.561
17.00	42.07	96.64	62.54	11.912
18.00	44.91	102.36	65.95	12.239
19.00	47.73	108.02	69.33	12.545
20.00	50.52	113.63	72.68	12.832
21.00	53.28	119.19	76.00	13.104
22.00	56.03	124.73	79.31	13.361
23.00	58.77	130.23	82.59	13.606
24.00	61.49	135.71	85.86	13.839
25.00	64.20	141.16	89.12	14.062
26.00	66.89	146.59	92.37	14.275
27.00	69.58	152.01	95.60	14.479
28.00	72.26	157.41	98.83	14.676
29.00	74.94	162.79	102.05	14.865
30.00	77.60	168.17	105.26	15.047
31.00	80.26	173.53	108.47	15.223
32.00	82.92	178.88	111.67	15.393
33.00	85.56	184.22	114.86	15.557
34.00	88.21	189.56	118.05	15.716
35.00	90.85	194.88	121.24	15.871
36.00	93.48	200.20	124.42	16.020
37.00	96.12	205.51	127.60	16.166
38.00	98.74	210.82	130.77	16.307
39.00	101.37	216.12	133.95	16.445
40.00	103.99	221.41	137.11	16.579
41.00	106.61	226.70	140.28	16.710
42.00	109.23	231.99	143.45	16.837
43.00	111.84	237.27	146.61	16.961
44.00	114.46	242.55	149.77	17.083
45.00	117.07	247.82	152.92	17.201
46.00	119.68	253.09	156.08	17.317
47.00	122.28	258.36	159.23	17.430
48.00	124.89	263.62	162.39	17.541
49.00	127.49	268.89	165.54	17.650
50.00	130.09	274.14	168.69	17.756
51.00	132.69	279.40	171.84	17.860
52.00	135.29	284.65	174.98	17.962
53.00	137.89	289.91	178.13	18.062
54.00	140.49	295.16	181.27	18.160
55.00	143.08	300.40	184.42	18.256
56.00	145.68	305.65	187.56	18.351
57.00	148.27	310.89	190.70	18.444
58.00	150.86	316.14	193.84	18.535
59.00	153.45	321.38	196.98	18.625
60.00	156.04	326.61	200.12	18.713
61.00	158.63	331.85	203.26	18.799
62.00	161.22	337.09	206.40	18.884
63.00	163.81	342.32	209.53	18.968
64.00	166.40	347.56	212.67	19.051
65.00	168.98	352.79	215.81	19.132
66.00	171.57	358.02	218.94	19.212
67.00	174.16	363.25	222.08	19.290
68.00	176.74	368.48	225.21	19.368
69.00	179.32	373.71	228.34	19.444
70.00	181.91	378.93	231.48	19.519
71.00	184.49	384.16	234.61	19.593
72.00	187.07	389.39	237.74	19.666
73.00	189.65	394.61	240.87	19.738
74.00	192.24	399.83	244.00	19.809
75.00	194.82	405.06	247.13	19.880
76.00	197.40	410.28	250.26	19.949
77.00	199.98	415.50	253.39	20.017
78.00	202.56	420.72	256.52	20.084
79.00	205.13	425.94	259.65	20.151
80.00	207.71	431.16	262.78	20.217
81.00	210.29	436.38	265.91	20.281
82.00	212.87	441.59	269.04	20.345
83.00	215.45	446.81	272.17	20.409
84.00	218.02	452.03	275.29	20.471
85.00	220.60	457.24	278.42	20.533
86.00	223.18	462.46	281.55	20.594
87.00	225.75	467.67	284.67	20.654
88.00	228.33	472.89	287.80	20.714
89.00	230.91	478.10	290.93	20.773
90.00	233.48	483.32	294.05	20.831
91.00	236.06	488.53	297.18	20.888
92.00	238.63	493.74	300.30	20.945
93.00	241.21	498.95	303.43	21.002
94.00	243.78	504.17	306.55	21.058
95.00	246.35	509.38	309.68	21.113
96.00	248.93	514.59	312.80	21.167
97.00	251.50	519.80	315.93	21.221
98.00	254.08	525.01	319.05	21.275
99.00	256.65	530.22	322.18	21.328
100.00	259.22	535.43	325.30	21.380
101.00	261.79	540.64	328.42	21.432
102.00	264.37	545.85	331.55	21.483
103.00	266.94	551.06	334.67	21.534
104.00	269.51	556.27	337.79	21.584
105.00	272.08	561.47	340.92	21.634
106.00	274.66	566.68	344.04	21.683
107.00	277.23	571.89	347.16	21.732
108.00	279.80	577.10	350.28	21.781
109.00	282.37	582.30	353.41	21.829
110.00	284.94	587.51	356.53	21.876
111.00	287.51	592.72	359.65	21.923
112.00	290.08	597.92	362.77	21.970
113.00	292.65	603.13	365.90	22.016
114.00	295.23	608.33	369.02	22.062
115.00	297.80	613.54	372.14	22.108
116.00	300.37	618.75	375.26	22.153
117.00	302.94	623.95	378.38	22.197
118.00	305.51	629.15	381.50	22.242
119.00	308.08	634.36	384.63	22.286
120.00	310.65	639.56	387.75	22.329
121.00	313.22	644.77	390.87	22.372
122.00	315.79	649.97	393.99	22.415
123.00	318.36	655.18	397.11	22.458
124.00	320.93	660.38	400.23	22.500
125.00	323.49	665.58	403.35	22.542
126.00	326.06	670.79	406.47	22.583
127.00	328.63	675.99	409.59	22.624
128.00	331.20	681.19	412.71	22.665
129.00	333.77	686.40	415.83	22.706
130.00	336.34	691.60	418.95	22.746
131.00	338.91	696.80	422.07	22.786
132.00	341.48	702.00	425.19	22.825
133.00	344.05	707.21	428.31	22.864
134.00	346.61	712.41	431.43	22.903
135.00	349.18	717.61	434.55	22.942
136.00	351.75	722.81	437.67	22.980
137.00	354.32	728.01	440.79	23.019
138.00	356.89	733.22	443.91	23.056
139.00	359.46	738.42	447.03	23.094
140.00	362.02	743.62	450.15	23.131

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	364.59	748.82	453.27	23.168	221.00	569.87	1164.66	702.71	25.504
142.00	367.16	754.02	456.39	23.205	222.00	572.44	1169.86	705.83	25.528
143.00	369.73	759.22	459.51	23.242	223.00	575.00	1175.05	708.94	25.551
144.00	372.30	764.42	462.63	23.278	224.00	577.56	1180.25	712.06	25.574
145.00	374.86	769.62	465.75	23.314	225.00	580.13	1185.44	715.18	25.598
146.00	377.43	774.82	468.87	23.349	226.00	582.69	1190.64	718.29	25.621
147.00	380.00	780.02	471.99	23.385	227.00	585.26	1195.83	721.41	25.644
148.00	382.57	785.22	475.11	23.420	228.00	587.82	1201.03	724.53	25.666
149.00	385.13	790.42	478.23	23.455	229.00	590.39	1206.23	727.65	25.689
150.00	387.70	795.62	481.35	23.490	230.00	592.95	1211.42	730.76	25.712
151.00	390.27	800.82	484.47	23.525	231.00	595.52	1216.62	733.88	25.734
152.00	392.83	806.02	487.58	23.559	232.00	598.08	1221.81	737.00	25.757
153.00	395.40	811.22	490.70	23.593	233.00	600.65	1227.01	740.11	25.779
154.00	397.97	816.42	493.82	23.627	234.00	603.21	1232.20	743.23	25.801
155.00	400.54	821.62	496.94	23.661	235.00	605.78	1237.40	746.35	25.823
156.00	403.10	826.82	500.06	23.694	236.00	608.34	1242.60	749.46	25.846
157.00	405.67	832.02	503.18	23.727	237.00	610.90	1247.79	752.58	25.868
158.00	408.24	837.22	506.30	23.760	238.00	613.47	1252.99	755.70	25.889
159.00	410.80	842.42	509.42	23.793	239.00	616.03	1258.18	758.81	25.911
160.00	413.37	847.62	512.53	23.826	240.00	618.60	1263.38	761.93	25.933
161.00	415.94	852.82	515.65	23.858	241.00	621.16	1268.57	765.05	25.954
162.00	418.50	858.02	518.77	23.890	242.00	623.73	1273.77	768.16	25.976
163.00	421.07	863.22	521.89	23.922	243.00	626.29	1278.96	771.28	25.997
164.00	423.64	868.42	525.01	23.954	244.00	628.86	1284.16	774.40	26.019
165.00	426.20	873.62	528.13	23.986	245.00	631.42	1289.35	777.51	26.040
166.00	428.77	878.82	531.25	24.017	246.00	633.98	1294.55	780.63	26.061
167.00	431.34	884.01	534.36	24.048	247.00	636.55	1299.75	783.75	26.082
168.00	433.90	889.21	537.48	24.079	248.00	639.11	1304.94	786.86	26.103
169.00	436.47	894.41	540.60	24.110	249.00	641.68	1310.14	789.98	26.124
170.00	439.03	899.61	543.72	24.141	250.00	644.24	1315.33	793.10	26.145
171.00	441.60	904.81	546.84	24.171	251.00	646.81	1320.53	796.21	26.166
172.00	444.17	910.01	549.95	24.202	252.00	649.37	1325.72	799.33	26.186
173.00	446.73	915.20	553.07	24.232	253.00	651.93	1330.92	802.45	26.207
174.00	449.30	920.40	556.19	24.262	254.00	654.50	1336.11	805.56	26.227
175.00	451.87	925.60	559.31	24.291	255.00	657.06	1341.31	808.68	26.248
176.00	454.43	930.80	562.43	24.321	256.00	659.63	1346.50	811.79	26.268
177.00	457.00	936.00	565.55	24.351	257.00	662.19	1351.70	814.91	26.288
178.00	459.56	941.19	568.66	24.380	258.00	664.75	1356.89	818.03	26.309
179.00	462.13	946.39	571.78	24.409	259.00	667.32	1362.09	821.14	26.329
180.00	464.70	951.59	574.90	24.438	260.00	669.88	1367.28	824.26	26.349
181.00	467.26	956.79	578.02	24.467	261.00	672.45	1372.48	827.38	26.369
182.00	469.83	961.99	581.13	24.495	262.00	675.01	1377.67	830.49	26.389
183.00	472.39	967.18	584.25	24.524	263.00	677.58	1382.87	833.61	26.408
184.00	474.96	972.38	587.37	24.552	264.00	680.14	1388.06	836.73	26.428
185.00	477.52	977.58	590.49	24.580	265.00	682.70	1393.26	839.84	26.448
186.00	480.09	982.78	593.61	24.608	266.00	685.27	1398.45	842.96	26.467
187.00	482.66	987.97	596.72	24.636	267.00	687.83	1403.65	846.08	26.487
188.00	485.22	993.17	599.84	24.664	268.00	690.40	1408.84	849.19	26.506
189.00	487.79	998.37	602.96	24.692	269.00	692.96	1414.04	852.31	26.525
190.00	490.35	1003.57	606.08	24.719	270.00	695.52	1419.23	855.42	26.545
191.00	492.92	1008.76	609.19	24.746	271.00	698.09	1424.43	858.54	26.564
192.00	495.48	1013.96	612.31	24.773	272.00	700.65	1429.62	861.66	26.583
193.00	498.05	1019.16	615.43	24.800	273.00	703.22	1434.82	864.77	26.602
194.00	500.61	1024.35	618.55	24.827	274.00	705.78	1440.01	867.89	26.621
195.00	503.18	1029.55	621.66	24.854	275.00	708.34	1445.20	871.01	26.640
196.00	505.74	1034.75	624.78	24.881	276.00	710.91	1450.40	874.12	26.659
197.00	508.31	1039.95	627.90	24.907	277.00	713.47	1455.59	877.24	26.678
198.00	510.88	1045.14	631.02	24.933	278.00	716.04	1460.79	880.36	26.696
199.00	513.44	1050.34	634.13	24.959	279.00	718.60	1465.98	883.47	26.715
200.00	516.01	1055.54	637.25	24.986	280.00	721.16	1471.18	886.59	26.734
201.00	518.57	1060.73	640.37	25.011	281.00	723.73	1476.37	889.70	26.752
202.00	521.14	1065.93	643.49	25.037	282.00	726.29	1481.57	892.82	26.771
203.00	523.70	1071.13	646.60	25.063	283.00	728.86	1486.76	895.94	26.789
204.00	526.27	1076.32	649.72	25.088	284.00	731.42	1491.96	899.05	26.807
205.00	528.83	1081.52	652.84	25.114	285.00	733.98	1497.15	902.17	26.826
206.00	531.40	1086.72	655.95	25.139	286.00	736.55	1502.35	905.29	26.844
207.00	533.96	1091.91	659.07	25.164	287.00	739.11	1507.54	908.40	26.862
208.00	536.53	1097.11	662.19	25.189	288.00	741.67	1512.73	911.52	26.880
209.00	539.09	1102.31	665.31	25.214	289.00	744.24	1517.93	914.63	26.898
210.00	541.66	1107.50	668.42	25.239	290.00	746.80	1523.12	917.75	26.916
211.00	544.22	1112.70	671.54	25.264	291.00	749.37	1528.32	920.87	26.934
212.00	546.79	1117.89	674.66	25.288	292.00	751.93	1533.51	923.98	26.952
213.00	549.35	1123.09	677.77	25.313	293.00	754.49	1538.71	927.10	26.969
214.00	551.92	1128.29	680.89	25.337	294.00	757.06	1543.90	930.21	26.987
215.00	554.48	1133.48	684.01	25.361	295.00	759.62	1549.10	933.33	27.005
216.00	557.05	1138.68	687.13	25.385	296.00	762.18	1554.29	936.45	27.022
217.00	559.61	1143.88	690.24	25.409	297.00	764.75	1559.48	939.56	27.040
218.00	562.18	1149.07	693.36	25.433	298.00	767.31	1564.68	942.68	27.057
219.00	564.74	1154.27	696.48	25.457	299.00	769.88	1569.87	945.80	27.075
220.00	567.31	1159.46	699.59	25.481	300.00	772.44	1575.07	948.91	27.092

9.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	6.35	10.36	4.58	2.071
4.00	6.63	12.74	6.70	2.774
5.00	7.07	16.00	9.56	3.520
6.00	7.81	20.46	13.34	4.327
7.00	9.17	26.51	18.15	5.260
8.00	11.63	34.72	24.11	6.353
9.00	14.82	43.46	29.94	7.382
10.00	18.01	51.38	34.96	8.218
11.00	21.05	58.63	39.43	8.909
12.00	23.96	65.41	43.56	9.499
13.00	26.76	71.87	47.47	10.017
14.00	29.49	78.12	51.22	10.480
15.00	32.16	84.20	54.87	10.899
16.00	34.77	90.15	58.44	11.283
17.00	37.35	96.00	61.94	11.638
18.00	39.90	101.77	65.39	11.968
19.00	42.42	107.48	68.80	12.276
20.00	44.91	113.13	72.17	12.566
21.00	47.39	118.74	75.52	12.840
22.00	49.84	124.30	78.85	13.099
23.00	52.29	129.84	82.15	13.345
24.00	54.72	135.34	85.44	13.579
25.00	57.14	140.83	88.72	13.803
26.00	59.55	146.28	91.98	14.017
27.00	61.95	151.72	95.23	14.222
28.00	64.34	157.15	98.47	14.420
29.00	66.73	162.55	101.70	14.609
30.00	69.10	167.94	104.92	14.792
31.00	71.48	173.32	108.14	14.969
32.00	73.84	178.69	111.35	15.139
33.00	76.21	184.05	114.55	15.304
34.00	78.56	189.40	117.75	15.464
35.00	80.92	194.74	120.95	15.618
36.00	83.27	200.07	124.14	15.769
37.00	85.61	205.39	127.32	15.914
38.00	87.95	210.71	130.50	16.056
39.00	90.29	216.02	133.68	16.194
40.00	92.63	221.33	136.86	16.329
41.00	94.96	226.63	140.03	16.459
42.00	97.29	231.93	143.20	16.587
43.00	99.62	237.22	146.37	16.712
44.00	101.95	242.51	149.53	16.833
45.00	104.28	247.79	152.69	16.952
46.00	106.60	253.07	155.85	17.068
47.00	108.92	258.34	159.01	17.181
48.00	111.24	263.62	162.17	17.292
49.00	113.56	268.88	165.33	17.401
50.00	115.87	274.15	168.48	17.507
51.00	118.19	279.41	171.63	17.612
52.00	120.50	284.67	174.78	17.714
53.00	122.82	289.93	177.93	17.814
54.00	125.13	295.19	181.08	17.912
55.00	127.44	300.44	184.23	18.009
56.00	129.75	305.69	187.37	18.103
57.00	132.05	310.94	190.52	18.196
58.00	134.36	316.19	193.66	18.287
59.00	136.67	321.44	196.80	18.377
60.00	138.97	326.68	199.95	18.465
61.00	141.28	331.92	203.09	18.552
62.00	143.58	337.17	206.23	18.637
63.00	145.88	342.41	209.37	18.721
64.00	148.19	347.64	212.51	18.803
65.00	150.49	352.88	215.64	18.885
66.00	152.79	358.12	218.78	18.965
67.00	155.09	363.35	221.92	19.043
68.00	157.39	368.58	225.05	19.121
69.00	159.69	373.82	228.19	19.197
70.00	161.98	379.05	231.32	19.272
71.00	164.28	384.28	234.46	19.347
72.00	166.58	389.51	237.59	19.420
73.00	168.88	394.73	240.73	19.492
74.00	171.17	399.96	243.86	19.563
75.00	173.47	405.19	246.99	19.633
76.00	175.76	410.41	250.12	19.702
77.00	178.06	415.64	253.25	19.771
78.00	180.35	420.86	256.39	19.838
79.00	182.65	426.08	259.52	19.905
80.00	184.94	431.30	262.65	19.970
81.00	187.24	436.53	265.78	20.035
82.00	189.53	441.75	268.91	20.099
83.00	191.82	446.97	272.04	20.162
84.00	194.11	452.19	275.16	20.225
85.00	196.41	457.40	278.29	20.287
86.00	198.70	462.62	281.42	20.348
87.00	200.99	467.84	284.55	20.408
88.00	203.28	473.06	287.68	20.468
89.00	205.57	478.27	290.80	20.527
90.00	207.86	483.49	293.93	20.585
91.00	210.15	488.71	297.06	20.643
92.00	212.44	493.92	300.19	20.700
93.00	214.73	499.14	303.31	20.756
94.00	217.02	504.35	306.44	20.812
95.00	219.31	509.56	309.56	20.867
96.00	221.60	514.78	312.69	20.921
97.00	223.89	519.99	315.82	20.975
98.00	226.18	525.20	318.94	21.029
99.00	228.46	530.41	322.07	21.082
100.00	230.75	535.63	325.19	21.134
101.00	233.04	540.84	328.32	21.186
102.00	235.33	546.05	331.44	21.237
103.00	237.62	551.26	334.56	21.288
104.00	239.90	556.47	337.69	21.339
105.00	242.19	561.68	340.81	21.388
106.00	244.48	566.89	343.94	21.438
107.00	246.77	572.10	347.06	21.487
108.00	249.05	577.31	350.18	21.535
109.00	251.34	582.52	353.31	21.583
110.00	253.63	587.72	356.43	21.631
111.00	255.91	592.93	359.55	21.678
112.00	258.20	598.14	362.68	21.725
113.00	260.48	603.35	365.80	21.771
114.00	262.77	608.56	368.92	21.817
115.00	265.06	613.76	372.05	21.862
116.00	267.34	618.97	375.17	21.907
117.00	269.63	624.18	378.29	21.952
118.00	271.91	629.38	381.41	21.996
119.00	274.20	634.59	384.53	22.040
120.00	276.48	639.79	387.66	22.084
121.00	278.77	645.00	390.78	22.127
122.00	281.05	650.21	393.90	22.170
123.00	283.34	655.41	397.02	22.212
124.00	285.62	660.62	400.14	22.255
125.00	287.91	665.82	403.26	22.296
126.00	290.19	671.03	406.39	22.338
127.00	292.48	676.23	409.51	22.379
128.00	294.76	681.43	412.63	22.420
129.00	297.04	686.64	415.75	22.460
130.00	299.33	691.84	418.87	22.500
131.00	301.61	697.05	421.99	22.540
132.00	303.90	702.25	425.11	22.580
133.00	306.18	707.45	428.23	22.619
134.00	308.46	712.66	431.35	22.658
135.00	310.75	717.86	434.47	22.697
136.00	313.03	723.06	437.59	22.735
137.00	315.31	728.26	440.71	22.773
138.00	317.60	733.47	443.84	22.811
139.00	319.88	738.67	446.96	22.849
140.00	322.16	743.87	450.08	22.886

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	324.45	749.07	453.20	22.923	221.00	506.95	1164.97	702.66	25.259
142.00	326.73	754.28	456.32	22.960	222.00	509.23	1170.17	705.78	25.283
143.00	329.01	759.48	459.44	22.996	223.00	511.51	1175.36	708.89	25.306
144.00	331.30	764.68	462.56	23.033	224.00	513.79	1180.56	712.01	25.330
145.00	333.58	769.88	465.68	23.069	225.00	516.07	1185.76	715.13	25.353
146.00	335.86	775.08	468.80	23.104	226.00	518.35	1190.95	718.25	25.376
147.00	338.14	780.29	471.91	23.140	227.00	520.63	1196.15	721.36	25.399
148.00	340.43	785.49	475.03	23.175	228.00	522.91	1201.34	724.48	25.421
149.00	342.71	790.69	478.15	23.210	229.00	525.19	1206.54	727.60	25.444
150.00	344.99	795.89	481.27	23.245	230.00	527.47	1211.74	730.71	25.467
151.00	347.28	801.09	484.39	23.279	231.00	529.75	1216.93	733.83	25.489
152.00	349.56	806.29	487.51	23.314	232.00	532.03	1222.13	736.95	25.512
153.00	351.84	811.49	490.63	23.348	233.00	534.31	1227.32	740.06	25.534
154.00	354.12	816.69	493.75	23.382	234.00	536.59	1232.52	743.18	25.556
155.00	356.40	821.89	496.87	23.415	235.00	538.87	1237.72	746.30	25.579
156.00	358.69	827.09	499.99	23.449	236.00	541.15	1242.91	749.42	25.601
157.00	360.97	832.29	503.11	23.482	237.00	543.42	1248.11	752.53	25.623
158.00	363.25	837.49	506.23	23.515	238.00	545.70	1253.30	755.65	25.645
159.00	365.53	842.69	509.35	23.548	239.00	547.98	1258.50	758.77	25.666
160.00	367.81	847.89	512.47	23.581	240.00	550.26	1263.70	761.88	25.688
161.00	370.10	853.09	515.58	23.613	241.00	552.54	1268.89	765.00	25.710
162.00	372.38	858.29	518.70	23.645	242.00	554.82	1274.09	768.12	25.731
163.00	374.66	863.49	521.82	23.677	243.00	557.10	1279.28	771.23	25.753
164.00	376.94	868.69	524.94	23.709	244.00	559.38	1284.48	774.35	25.774
165.00	379.22	873.89	528.06	23.741	245.00	561.66	1289.67	777.47	25.795
166.00	381.51	879.09	531.18	23.772	246.00	563.94	1294.87	780.58	25.816
167.00	383.79	884.29	534.30	23.803	247.00	566.22	1300.07	783.70	25.837
168.00	386.07	889.49	537.42	23.834	248.00	568.50	1305.26	786.82	25.858
169.00	388.35	894.69	540.54	23.865	249.00	570.78	1310.46	789.93	25.879
170.00	390.63	899.89	543.65	23.896	250.00	573.06	1315.65	793.05	25.900
171.00	392.91	905.09	546.77	23.926	251.00	575.34	1320.85	796.17	25.921
172.00	395.20	910.29	549.89	23.957	252.00	577.62	1326.04	799.28	25.942
173.00	397.48	915.49	553.01	23.987	253.00	579.90	1331.24	802.40	25.962
174.00	399.76	920.69	556.13	24.017	254.00	582.18	1336.43	805.52	25.983
175.00	402.04	925.89	559.25	24.046	255.00	584.46	1341.63	808.63	26.003
176.00	404.32	931.08	562.36	24.076	256.00	586.74	1346.83	811.75	26.023
177.00	406.60	936.28	565.48	24.106	257.00	589.02	1352.02	814.87	26.044
178.00	408.88	941.48	568.60	24.135	258.00	591.30	1357.22	817.98	26.064
179.00	411.16	946.68	571.72	24.164	259.00	593.58	1362.41	821.10	26.084
180.00	413.45	951.88	574.84	24.193	260.00	595.85	1367.61	824.22	26.104
181.00	415.73	957.08	577.96	24.222	261.00	598.13	1372.80	827.33	26.124
182.00	418.01	962.28	581.07	24.250	262.00	600.41	1378.00	830.45	26.144
183.00	420.29	967.47	584.19	24.279	263.00	602.69	1383.19	833.57	26.163
184.00	422.57	972.67	587.31	24.307	264.00	604.97	1388.39	836.68	26.183
185.00	424.85	977.87	590.43	24.335	265.00	607.25	1393.58	839.80	26.203
186.00	427.13	983.07	593.55	24.363	266.00	609.53	1398.78	842.92	26.222
187.00	429.41	988.27	596.66	24.391	267.00	611.81	1403.97	846.03	26.242
188.00	431.69	993.46	599.78	24.419	268.00	614.09	1409.17	849.15	26.261
189.00	433.97	998.66	602.90	24.447	269.00	616.37	1414.36	852.27	26.281
190.00	436.26	1003.86	606.02	24.474	270.00	618.65	1419.56	855.38	26.300
191.00	438.54	1009.06	609.14	24.501	271.00	620.93	1424.75	858.50	26.319
192.00	440.82	1014.26	612.25	24.528	272.00	623.21	1429.95	861.62	26.338
193.00	443.10	1019.45	615.37	24.555	273.00	625.49	1435.14	864.73	26.357
194.00	445.38	1024.65	618.49	24.582	274.00	627.77	1440.34	867.85	26.376
195.00	447.66	1029.85	621.61	24.609	275.00	630.04	1445.53	870.97	26.395
196.00	449.94	1035.05	624.72	24.636	276.00	632.32	1450.73	874.08	26.414
197.00	452.22	1040.24	627.84	24.662	277.00	634.60	1455.92	877.20	26.433
198.00	454.50	1045.44	630.96	24.688	278.00	636.88	1461.12	880.31	26.452
199.00	456.78	1050.64	634.08	24.715	279.00	639.16	1466.31	883.43	26.470
200.00	459.06	1055.84	637.19	24.741	280.00	641.44	1471.51	886.55	26.489
201.00	461.34	1061.03	640.31	24.766	281.00	643.72	1476.70	889.66	26.507
202.00	463.62	1066.23	643.43	24.792	282.00	646.00	1481.90	892.78	26.526
203.00	465.90	1071.43	646.55	24.818	283.00	648.28	1487.09	895.90	26.544
204.00	468.18	1076.62	649.67	24.843	284.00	650.56	1492.29	899.01	26.563
205.00	470.46	1081.82	652.78	24.869	285.00	652.84	1497.48	902.13	26.581
206.00	472.74	1087.02	655.90	24.894	286.00	655.12	1502.68	905.25	26.599
207.00	475.02	1092.22	659.02	24.919	287.00	657.39	1507.87	908.36	26.617
208.00	477.30	1097.41	662.14	24.944	288.00	659.67	1513.07	911.48	26.635
209.00	479.59	1102.61	665.25	24.969	289.00	661.95	1518.26	914.59	26.653
210.00	481.87	1107.81	668.37	24.994	290.00	664.23	1523.46	917.71	26.671
211.00	484.15	1113.00	671.49	25.019	291.00	666.51	1528.65	920.83	26.689
212.00	486.43	1118.20	674.60	25.043	292.00	668.79	1533.85	923.94	26.707
213.00	488.71	1123.40	677.72	25.068	293.00	671.07	1539.04	927.06	26.725
214.00	490.99	1128.59	680.84	25.092	294.00	673.35	1544.24	930.18	26.742
215.00	493.27	1133.79	683.96	25.116	295.00	675.63	1549.43	933.29	26.760
216.00	495.55	1138.99	687.07	25.141	296.00	677.91	1554.63	936.41	26.778
217.00	497.83	1144.18	690.19	25.165	297.00	680.19	1559.82	939.53	26.795
218.00	500.11	1149.38	693.31	25.188	298.00	682.46	1565.01	942.64	26.813
219.00	502.39	1154.58	696.43	25.212	299.00	684.74	1570.21	945.76	26.830
220.00	504.67	1159.77	699.54	25.236	300.00	687.02	1575.40	948.87	26.847

10.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	6.30	10.94	4.56	2.050
4.00	6.56	13.27	6.63	2.740
5.00	6.96	16.45	9.39	3.466
6.00	7.61	20.70	12.99	4.236
7.00	8.73	26.25	17.41	5.093
8.00	10.64	33.69	22.90	6.083
9.00	13.28	42.12	28.67	7.076
10.00	16.09	50.12	33.82	7.920
11.00	18.82	57.50	38.43	8.623
12.00	21.45	64.40	42.67	9.224
13.00	23.99	70.97	46.67	9.750
14.00	26.47	77.31	50.49	10.220
15.00	28.88	83.46	54.19	10.644
16.00	31.26	89.48	57.81	11.033
17.00	33.60	95.39	61.35	11.391
18.00	35.90	101.21	64.83	11.724
19.00	38.18	106.96	68.27	12.035
20.00	40.44	112.66	71.68	12.327
21.00	42.68	118.30	75.05	12.602
22.00	44.91	123.90	78.40	12.863
23.00	47.12	129.47	81.72	13.110
24.00	49.32	135.00	85.03	13.346
25.00	51.50	140.51	88.32	13.571
26.00	53.68	145.99	91.60	13.786
27.00	55.85	151.45	94.86	13.992
28.00	58.01	156.90	98.11	14.190
29.00	60.17	162.32	101.36	14.380
30.00	62.31	167.73	104.59	14.564
31.00	64.46	173.13	107.82	14.741
32.00	66.59	178.51	111.04	14.911
33.00	68.72	183.89	114.25	15.077
34.00	70.85	189.25	117.46	15.237
35.00	72.98	194.60	120.66	15.392
36.00	75.10	199.95	123.86	15.543
37.00	77.21	205.29	127.05	15.689
38.00	79.33	210.62	130.24	15.831
39.00	81.44	215.94	133.42	15.969
40.00	83.54	221.26	136.60	16.104
41.00	85.65	226.57	139.78	16.235
42.00	87.75	231.87	142.96	16.363
43.00	89.85	237.17	146.13	16.488
44.00	91.95	242.47	149.30	16.609
45.00	94.05	247.76	152.47	16.728
46.00	96.14	253.05	155.63	16.845
47.00	98.23	258.33	158.79	16.958
48.00	100.32	263.61	161.96	17.069
49.00	102.41	268.89	165.12	17.178
50.00	104.50	274.16	168.27	17.285
51.00	106.59	279.43	171.43	17.389
52.00	108.67	284.70	174.58	17.491
53.00	110.76	289.96	177.74	17.592
54.00	112.84	295.23	180.89	17.690
55.00	114.92	300.49	184.04	17.787
56.00	117.00	305.74	187.19	17.881
57.00	119.08	311.00	190.33	17.974
58.00	121.16	316.25	193.48	18.066
59.00	123.24	321.50	196.63	18.155
60.00	125.32	326.75	199.77	18.244
61.00	127.39	332.00	202.92	18.330
62.00	129.47	337.25	206.06	18.416
63.00	131.54	342.49	209.20	18.500
64.00	133.62	347.73	212.34	18.582
65.00	135.69	352.97	215.48	18.663
66.00	137.76	358.21	218.62	18.743
67.00	139.84	363.45	221.76	18.822
68.00	141.91	368.69	224.90	18.900
69.00	143.98	373.93	228.04	18.976
70.00	146.05	379.16	231.17	19.052
71.00	148.12	384.39	234.31	19.126
72.00	150.19	389.63	237.45	19.199
73.00	152.26	394.86	240.58	19.271
74.00	154.32	400.09	243.72	19.342
75.00	156.39	405.32	246.85	19.412
76.00	158.46	410.55	249.98	19.482
77.00	160.53	415.78	253.12	19.550
78.00	162.59	421.00	256.25	19.617
79.00	164.66	426.23	259.38	19.684
80.00	166.73	431.45	262.51	19.750
81.00	168.79	436.68	265.65	19.815
82.00	170.86	441.90	268.78	19.879
83.00	172.92	447.12	271.91	19.942
84.00	174.98	452.35	275.04	20.005
85.00	177.05	457.57	278.17	20.066
86.00	179.11	462.79	281.30	20.127
87.00	181.18	468.01	284.43	20.188
88.00	183.24	473.23	287.56	20.248
89.00	185.30	478.45	290.68	20.306
90.00	187.37	483.67	293.81	20.365
91.00	189.43	488.88	296.94	20.422
92.00	191.49	494.10	300.07	20.479
93.00	193.55	499.32	303.20	20.536
94.00	195.61	504.53	306.32	20.592
95.00	197.67	509.75	309.45	20.647
96.00	199.74	514.97	312.58	20.701
97.00	201.80	520.18	315.71	20.755
98.00	203.86	525.40	318.83	20.809
99.00	205.92	530.61	321.96	20.862
100.00	207.98	535.82	325.08	20.914
101.00	210.04	541.04	328.21	20.966
102.00	212.10	546.25	331.33	21.018
103.00	214.16	551.46	334.46	21.068
104.00	216.22	556.67	337.59	21.119
105.00	218.28	561.89	340.71	21.169
106.00	220.34	567.10	343.84	21.218
107.00	222.40	572.31	346.96	21.267
108.00	224.45	577.52	350.08	21.315
109.00	226.51	582.73	353.21	21.363
110.00	228.57	587.94	356.33	21.411
111.00	230.63	593.15	359.46	21.458
112.00	232.69	598.36	362.58	21.505
113.00	234.75	603.57	365.70	21.551
114.00	236.81	608.78	368.83	21.597
115.00	238.86	613.99	371.95	21.643
116.00	240.92	619.19	375.07	21.688
117.00	242.98	624.40	378.20	21.732
118.00	245.04	629.61	381.32	21.777
119.00	247.09	634.82	384.44	21.821
120.00	249.15	640.02	387.57	21.864
121.00	251.21	645.23	390.69	21.907
122.00	253.27	650.44	393.81	21.950
123.00	255.32	655.65	396.93	21.993
124.00	257.38	660.85	400.06	22.035
125.00	259.44	666.06	403.18	22.077
126.00	261.49	671.26	406.30	22.118
127.00	263.55	676.47	409.42	22.159
128.00	265.61	681.68	412.54	22.200
129.00	267.66	686.88	415.66	22.241
130.00	269.72	692.09	418.79	22.281
131.00	271.77	697.29	421.91	22.321
132.00	273.83	702.50	425.03	22.360
133.00	275.89	707.70	428.15	22.400
134.00	277.94	712.90	431.27	22.439
135.00	280.00	718.11	434.39	22.477
136.00	282.05	723.31	437.51	22.516
137.00	284.11	728.52	440.64	22.554
138.00	286.17	733.72	443.76	22.592
139.00	288.22	738.92	446.88	22.629
140.00	290.28	744.13	450.00	22.667

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	292.33	749.33	453.12	22.704	221.00	456.61	1165.28	702.61	25.040
142.00	294.39	754.53	456.24	22.740	222.00	458.66	1170.48	705.73	25.064
143.00	296.44	759.74	459.36	22.777	223.00	460.71	1175.67	708.84	25.087
144.00	298.50	764.94	462.48	22.813	224.00	462.76	1180.87	711.96	25.110
145.00	300.55	770.14	465.60	22.849	225.00	464.82	1186.07	715.08	25.134
146.00	302.61	775.35	468.72	22.885	226.00	466.87	1191.26	718.20	25.157
147.00	304.66	780.55	471.84	22.920	227.00	468.92	1196.46	721.31	25.180
148.00	306.72	785.75	474.96	22.956	228.00	470.97	1201.66	724.43	25.202
149.00	308.77	790.95	478.08	22.991	229.00	473.03	1206.85	727.55	25.225
150.00	310.83	796.15	481.20	23.026	230.00	475.08	1212.05	730.67	25.248
151.00	312.88	801.36	484.32	23.060	231.00	477.13	1217.25	733.78	25.270
152.00	314.94	806.56	487.44	23.094	232.00	479.18	1222.44	736.90	25.293
153.00	316.99	811.76	490.56	23.129	233.00	481.23	1227.64	740.02	25.315
154.00	319.05	816.96	493.68	23.162	234.00	483.29	1232.84	743.13	25.337
155.00	321.10	822.16	496.80	23.196	235.00	485.34	1238.03	746.25	25.360
156.00	323.15	827.36	499.92	23.230	236.00	487.39	1243.23	749.37	25.382
157.00	325.21	832.57	503.04	23.263	237.00	489.44	1248.43	752.49	25.404
158.00	327.26	837.77	506.16	23.296	238.00	491.49	1253.62	755.60	25.425
159.00	329.32	842.97	509.28	23.329	239.00	493.55	1258.82	758.72	25.447
160.00	331.37	848.17	512.40	23.361	240.00	495.60	1264.01	761.84	25.469
161.00	333.43	853.37	515.52	23.394	241.00	497.65	1269.21	764.95	25.491
162.00	335.48	858.57	518.64	23.426	242.00	499.70	1274.41	768.07	25.512
163.00	337.53	863.77	521.76	23.458	243.00	501.75	1279.60	771.19	25.534
164.00	339.59	868.97	524.87	23.490	244.00	503.80	1284.80	774.30	25.555
165.00	341.64	874.17	527.99	23.521	245.00	505.86	1289.99	777.42	25.576
166.00	343.70	879.37	531.11	23.553	246.00	507.91	1295.19	780.54	25.597
167.00	345.75	884.57	534.23	23.584	247.00	509.96	1300.39	783.66	25.618
168.00	347.80	889.77	537.35	23.615	248.00	512.01	1305.58	786.77	25.639
169.00	349.86	894.97	540.47	23.646	249.00	514.06	1310.78	789.89	25.660
170.00	351.91	900.17	543.59	23.677	250.00	516.12	1315.97	793.01	25.681
171.00	353.96	905.37	546.71	23.707	251.00	518.17	1321.17	796.12	25.702
172.00	356.02	910.57	549.83	23.737	252.00	520.22	1326.37	799.24	25.722
173.00	358.07	915.77	552.95	23.767	253.00	522.27	1331.56	802.36	25.743
174.00	360.13	920.97	556.06	23.797	254.00	524.32	1336.76	805.47	25.764
175.00	362.18	926.17	559.18	23.827	255.00	526.37	1341.95	808.59	25.784
176.00	364.23	931.37	562.30	23.857	256.00	528.43	1347.15	811.71	25.804
177.00	366.29	936.57	565.42	23.886	257.00	530.48	1352.35	814.82	25.825
178.00	368.34	941.77	568.54	23.916	258.00	532.53	1357.54	817.94	25.845
179.00	370.39	946.97	571.66	23.945	259.00	534.58	1362.74	821.06	25.865
180.00	372.45	952.17	574.78	23.974	260.00	536.63	1367.93	824.17	25.885
181.00	374.50	957.37	577.89	24.003	261.00	538.68	1373.13	827.29	25.905
182.00	376.55	962.56	581.01	24.031	262.00	540.74	1378.32	830.41	25.925
183.00	378.61	967.76	584.13	24.060	263.00	542.79	1383.52	833.53	25.944
184.00	380.66	972.96	587.25	24.088	264.00	544.84	1388.71	836.64	25.964
185.00	382.71	978.16	590.37	24.116	265.00	546.89	1393.91	839.76	25.984
186.00	384.77	983.36	593.49	24.144	266.00	548.94	1399.11	842.88	26.003
187.00	386.82	988.56	596.60	24.172	267.00	550.99	1404.30	845.99	26.023
188.00	388.87	993.76	599.72	24.200	268.00	553.05	1409.50	849.11	26.042
189.00	390.92	998.96	602.84	24.227	269.00	555.10	1414.69	852.23	26.062
190.00	392.98	1004.15	605.96	24.255	270.00	557.15	1419.89	855.34	26.081
191.00	395.03	1009.35	609.08	24.282	271.00	559.20	1425.08	858.46	26.100
192.00	397.08	1014.55	612.20	24.309	272.00	561.25	1430.28	861.58	26.119
193.00	399.14	1019.75	615.31	24.336	273.00	563.30	1435.47	864.69	26.138
194.00	401.19	1024.95	618.43	24.363	274.00	565.35	1440.67	867.81	26.157
195.00	403.24	1030.15	621.55	24.390	275.00	567.41	1445.86	870.93	26.176
196.00	405.29	1035.34	624.67	24.416	276.00	569.46	1451.06	874.04	26.195
197.00	407.35	1040.54	627.79	24.443	277.00	571.51	1456.25	877.16	26.214
198.00	409.40	1045.74	630.90	24.469	278.00	573.56	1461.45	880.27	26.233
199.00	411.45	1050.94	634.02	24.495	279.00	575.61	1466.64	883.39	26.251
200.00	413.51	1056.14	637.14	24.521	280.00	577.66	1471.84	886.51	26.270
201.00	415.56	1061.33	640.26	24.547	281.00	579.71	1477.04	889.62	26.288
202.00	417.61	1066.53	643.38	24.573	282.00	581.77	1482.23	892.74	26.307
203.00	419.66	1071.73	646.49	24.599	283.00	583.82	1487.43	895.86	26.325
204.00	421.72	1076.93	649.61	24.624	284.00	585.87	1492.62	898.97	26.344
205.00	423.77	1082.12	652.73	24.650	285.00	587.92	1497.82	902.09	26.362
206.00	425.82	1087.32	655.85	24.675	286.00	589.97	1503.01	905.21	26.380
207.00	427.87	1092.52	658.96	24.700	287.00	592.02	1508.21	908.32	26.398
208.00	429.93	1097.72	662.08	24.725	288.00	594.07	1513.40	911.44	26.416
209.00	431.98	1102.91	665.20	24.750	289.00	596.13	1518.60	914.56	26.434
210.00	434.03	1108.11	668.32	24.775	290.00	598.18	1523.79	917.67	26.452
211.00	436.08	1113.31	671.43	24.800	291.00	600.23	1528.99	920.79	26.470
212.00	438.14	1118.51	674.55	24.824	292.00	602.28	1534.18	923.91	26.488
213.00	440.19	1123.70	677.67	24.849	293.00	604.33	1539.38	927.02	26.506
214.00	442.24	1128.90	680.79	24.873	294.00	606.38	1544.57	930.14	26.523
215.00	444.29	1134.10	683.91	24.897	295.00	608.43	1549.77	933.25	26.541
216.00	446.35	1139.30	687.02	24.921	296.00	610.48	1554.96	936.37	26.559
217.00	448.40	1144.49	690.14	24.945	297.00	612.54	1560.16	939.49	26.576
218.00	450.45	1149.69	693.26	24.969	298.00	614.59	1565.35	942.60	26.594
219.00	452.50	1154.89	696.37	24.993	299.00	616.64	1570.55	945.72	26.611
220.00	454.56	1160.08	699.49	25.017	300.00	618.69	1575.74	948.84	26.628

11.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	6.25	11.51	4.55	2.030
4.00	6.49	13.81	6.57	2.709
5.00	6.86	16.90	9.25	3.418
6.00	7.45	20.99	12.69	4.157
7.00	8.39	26.18	16.82	4.958
8.00	9.94	33.01	21.93	5.868
9.00	12.13	41.05	27.53	6.814
10.00	14.58	49.01	32.76	7.654
11.00	17.04	56.47	37.47	8.365
12.00	19.43	63.47	41.81	8.974
13.00	21.76	70.13	45.88	9.508
14.00	24.02	76.55	49.77	9.983
15.00	26.23	82.77	53.53	10.412
16.00	28.40	88.85	57.19	10.805
17.00	30.54	94.81	60.77	11.166
18.00	32.65	100.68	64.29	11.502
19.00	34.74	106.48	67.76	11.815
20.00	36.80	112.21	71.19	12.109
21.00	38.85	117.89	74.59	12.386
22.00	40.88	123.52	77.95	12.648
23.00	42.90	129.11	81.30	12.897
24.00	44.91	134.67	84.62	13.134
25.00	46.90	140.21	87.93	13.359
26.00	48.89	145.71	91.22	13.575
27.00	50.87	151.20	94.50	13.782
28.00	52.84	156.66	97.76	13.981
29.00	54.81	162.10	101.02	14.172
30.00	56.76	167.53	104.26	14.356
31.00	58.72	172.95	107.50	14.534
32.00	60.67	178.35	110.73	14.705
33.00	62.61	183.73	113.95	14.871
34.00	64.55	189.11	117.16	15.031
35.00	66.48	194.48	120.37	15.187
36.00	68.42	199.84	123.58	15.338
37.00	70.35	205.19	126.78	15.484
38.00	72.27	210.53	129.97	15.627
39.00	74.19	215.86	133.16	15.765
40.00	76.11	221.19	136.35	15.900
41.00	78.03	226.51	139.54	16.032
42.00	79.95	231.82	142.72	16.160
43.00	81.86	237.13	145.89	16.285
44.00	83.77	242.44	149.07	16.407
45.00	85.68	247.74	152.24	16.526
46.00	87.59	253.03	155.41	16.642
47.00	89.49	258.33	158.58	16.756
48.00	91.40	263.61	161.74	16.867
49.00	93.30	268.90	164.91	16.976
50.00	95.20	274.18	168.07	17.083
51.00	97.10	279.45	171.23	17.187
52.00	99.00	284.73	174.39	17.290
53.00	100.89	290.00	177.54	17.390
54.00	102.79	295.27	180.70	17.489
55.00	104.69	300.53	183.85	17.585
56.00	106.58	305.80	187.00	17.680
57.00	108.47	311.06	190.15	17.773
58.00	110.36	316.32	193.30	17.865
59.00	112.26	321.57	196.45	17.955
60.00	114.15	326.83	199.60	18.043
61.00	116.04	332.08	202.75	18.130
62.00	117.92	337.33	205.89	18.215
63.00	119.81	342.58	209.04	18.299
64.00	121.70	347.83	212.18	18.382
65.00	123.59	353.07	215.32	18.463
66.00	125.47	358.32	218.46	18.543
67.00	127.36	363.56	221.61	18.622
68.00	129.24	368.80	224.75	18.700
69.00	131.13	374.04	227.89	18.776
70.00	133.01	379.28	231.02	18.852
71.00	134.89	384.52	234.16	18.926
72.00	136.78	389.75	237.30	18.999
73.00	138.66	394.99	240.44	19.071
74.00	140.54	400.22	243.57	19.142
75.00	142.42	405.45	246.71	19.213
76.00	144.30	410.69	249.85	19.282
77.00	146.18	415.92	252.98	19.350
78.00	148.06	421.15	256.11	19.418
79.00	149.94	426.38	259.25	19.484
80.00	151.82	431.60	262.38	19.550
81.00	153.70	436.83	265.52	19.615
82.00	155.58	442.06	268.65	19.679
83.00	157.46	447.28	271.78	19.743
84.00	159.34	452.51	274.91	19.805
85.00	161.21	457.73	278.04	19.867
86.00	163.09	462.96	281.17	19.928
87.00	164.97	468.18	284.31	19.989
88.00	166.84	473.40	287.44	20.048
89.00	168.72	478.62	290.57	20.107
90.00	170.60	483.84	293.70	20.166
91.00	172.47	489.06	296.82	20.223
92.00	174.35	494.28	299.95	20.280
93.00	176.22	499.50	303.08	20.337
94.00	178.10	504.72	306.21	20.393
95.00	179.97	509.94	309.34	20.448
96.00	181.85	515.16	312.47	20.502
97.00	183.72	520.37	315.59	20.556
98.00	185.60	525.59	318.72	20.610
99.00	187.47	530.81	321.85	20.663
100.00	189.35	536.02	324.98	20.715
101.00	191.22	541.24	328.10	20.767
102.00	193.09	546.45	331.23	20.819
103.00	194.97	551.67	334.36	20.869
104.00	196.84	556.88	337.48	20.920
105.00	198.71	562.09	340.61	20.970
106.00	200.58	567.31	343.73	21.019
107.00	202.46	572.52	346.86	21.068
108.00	204.33	577.73	349.98	21.117
109.00	206.20	582.94	353.11	21.165
110.00	208.07	588.16	356.23	21.212
111.00	209.95	593.37	359.36	21.259
112.00	211.82	598.58	362.48	21.306
113.00	213.69	603.79	365.61	21.352
114.00	215.56	609.00	368.73	21.398
115.00	217.43	614.21	371.86	21.444
116.00	219.30	619.42	374.98	21.489
117.00	221.18	624.63	378.11	21.534
118.00	223.05	629.84	381.23	21.578
119.00	224.92	635.05	384.35	21.622
120.00	226.79	640.26	387.48	21.666
121.00	228.66	645.46	390.60	21.709
122.00	230.53	650.67	393.72	21.752
123.00	232.40	655.88	396.85	21.794
124.00	234.27	661.09	399.97	21.836
125.00	236.14	666.30	403.09	21.878
126.00	238.01	671.50	406.21	21.920
127.00	239.88	676.71	409.34	21.961
128.00	241.75	681.92	412.46	22.002
129.00	243.62	687.12	415.58	22.042
130.00	245.49	692.33	418.70	22.082
131.00	247.36	697.54	421.83	22.122
132.00	249.23	702.74	424.95	22.162
133.00	251.10	707.95	428.07	22.201
134.00	252.97	713.15	431.19	22.240
135.00	254.84	718.36	434.31	22.279
136.00	256.71	723.56	437.43	22.317
137.00	258.58	728.77	440.56	22.355
138.00	260.45	733.97	443.68	22.393
139.00	262.32	739.18	446.80	22.431
140.00	264.19	744.38	449.92	22.468

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	266.06	749.59	453.04	22.505	221.00	415.42	1165.59	702.56	24.842
142.00	267.92	754.79	456.16	22.542	222.00	417.29	1170.79	705.68	24.866
143.00	269.79	760.00	459.28	22.578	223.00	419.15	1175.98	708.79	24.889
144.00	271.66	765.20	462.40	22.615	224.00	421.02	1181.18	711.91	24.912
145.00	273.53	770.40	465.52	22.651	225.00	422.88	1186.38	715.03	24.935
146.00	275.40	775.61	468.65	22.686	226.00	424.75	1191.58	718.15	24.958
147.00	277.27	780.81	471.77	22.722	227.00	426.62	1196.77	721.27	24.981
148.00	279.14	786.01	474.89	22.757	228.00	428.48	1201.97	724.38	25.004
149.00	281.00	791.22	478.01	22.792	229.00	430.35	1207.17	727.50	25.027
150.00	282.87	796.42	481.13	22.827	230.00	432.21	1212.36	730.62	25.050
151.00	284.74	801.62	484.25	22.862	231.00	434.08	1217.56	733.73	25.072
152.00	286.61	806.83	487.37	22.896	232.00	435.94	1222.76	736.85	25.095
153.00	288.48	812.03	490.49	22.930	233.00	437.81	1227.96	739.97	25.117
154.00	290.35	817.23	493.61	22.964	234.00	439.68	1233.15	743.09	25.139
155.00	292.21	822.43	496.73	22.998	235.00	441.54	1238.35	746.20	25.161
156.00	294.08	827.63	499.85	23.031	236.00	443.41	1243.55	749.32	25.183
157.00	295.95	832.84	502.97	23.064	237.00	445.27	1248.74	752.44	25.205
158.00	297.82	838.04	506.09	23.097	238.00	447.14	1253.94	755.56	25.227
159.00	299.69	843.24	509.21	23.130	239.00	449.00	1259.14	758.67	25.249
160.00	301.55	848.44	512.33	23.163	240.00	450.87	1264.33	761.79	25.271
161.00	303.42	853.64	515.45	23.195	241.00	452.74	1269.53	764.91	25.292
162.00	305.29	858.85	518.57	23.227	242.00	454.60	1274.73	768.03	25.314
163.00	307.16	864.05	521.69	23.259	243.00	456.47	1279.92	771.14	25.335
164.00	309.02	869.25	524.81	23.291	244.00	458.33	1285.12	774.26	25.357
165.00	310.89	874.45	527.93	23.323	245.00	460.20	1290.31	777.38	25.378
166.00	312.76	879.65	531.05	23.354	246.00	462.06	1295.51	780.49	25.399
167.00	314.63	884.85	534.17	23.386	247.00	463.93	1300.71	783.61	25.420
168.00	316.49	890.05	537.29	23.417	248.00	465.79	1305.90	786.73	25.441
169.00	318.36	895.25	540.41	23.447	249.00	467.66	1311.10	789.85	25.462
170.00	320.23	900.45	543.52	23.478	250.00	469.52	1316.30	792.96	25.483
171.00	322.10	905.65	546.64	23.509	251.00	471.39	1321.49	796.08	25.504
172.00	323.96	910.85	549.76	23.539	252.00	473.26	1326.69	799.20	25.524
173.00	325.83	916.06	552.88	23.569	253.00	475.12	1331.88	802.31	25.545
174.00	327.70	921.26	556.00	23.599	254.00	476.99	1337.08	805.43	25.565
175.00	329.57	926.46	559.12	23.629	255.00	478.85	1342.28	808.55	25.586
176.00	331.43	931.66	562.24	23.659	256.00	480.72	1347.47	811.66	25.606
177.00	333.30	936.86	565.36	23.688	257.00	482.58	1352.67	814.78	25.626
178.00	335.17	942.06	568.48	23.717	258.00	484.45	1357.87	817.90	25.647
179.00	337.03	947.26	571.60	23.746	259.00	486.31	1363.06	821.02	25.667
180.00	338.90	952.46	574.72	23.775	260.00	488.18	1368.26	824.13	25.687
181.00	340.77	957.66	577.83	23.804	261.00	490.04	1373.45	827.25	25.707
182.00	342.63	962.85	580.95	23.833	262.00	491.91	1378.65	830.37	25.727
183.00	344.50	968.05	584.07	23.861	263.00	493.77	1383.84	833.48	25.746
184.00	346.37	973.25	587.19	23.890	264.00	495.64	1389.04	836.60	25.766
185.00	348.24	978.45	590.31	23.918	265.00	497.50	1394.24	839.72	25.786
186.00	350.10	983.65	593.43	23.946	266.00	499.37	1399.43	842.83	25.805
187.00	351.97	988.85	596.55	23.974	267.00	501.23	1404.63	845.95	25.825
188.00	353.84	994.05	599.66	24.002	268.00	503.10	1409.82	849.07	25.844
189.00	355.70	999.25	602.78	24.029	269.00	504.96	1415.02	852.18	25.864
190.00	357.57	1004.45	605.90	24.057	270.00	506.83	1420.22	855.30	25.883
191.00	359.44	1009.65	609.02	24.084	271.00	508.69	1425.41	858.42	25.902
192.00	361.30	1014.85	612.14	24.111	272.00	510.56	1430.61	861.53	25.921
193.00	363.17	1020.05	615.26	24.138	273.00	512.43	1435.80	864.65	25.940
194.00	365.03	1025.24	618.38	24.165	274.00	514.29	1441.00	867.77	25.959
195.00	366.90	1030.44	621.49	24.192	275.00	516.16	1446.19	870.88	25.978
196.00	368.77	1035.64	624.61	24.218	276.00	518.02	1451.39	874.00	25.997
197.00	370.63	1040.84	627.73	24.245	277.00	519.89	1456.58	877.12	26.016
198.00	372.50	1046.04	630.85	24.271	278.00	521.75	1461.78	880.23	26.035
199.00	374.37	1051.24	633.97	24.297	279.00	523.62	1466.98	883.35	26.053
200.00	376.23	1056.44	637.08	24.323	280.00	525.48	1472.17	886.47	26.072
201.00	378.10	1061.63	640.20	24.349	281.00	527.35	1477.37	889.58	26.090
202.00	379.97	1066.83	643.32	24.375	282.00	529.21	1482.56	892.70	26.109
203.00	381.83	1072.03	646.44	24.401	283.00	531.08	1487.76	895.82	26.127
204.00	383.70	1077.23	649.56	24.426	284.00	532.94	1492.95	898.93	26.145
205.00	385.56	1082.43	652.68	24.452	285.00	534.81	1498.15	902.05	26.164
206.00	387.43	1087.63	655.79	24.477	286.00	536.67	1503.34	905.17	26.182
207.00	389.30	1092.82	658.91	24.502	287.00	538.54	1508.54	908.28	26.200
208.00	391.16	1098.02	662.03	24.527	288.00	540.40	1513.73	911.40	26.218
209.00	393.03	1103.22	665.15	24.552	289.00	542.27	1518.93	914.52	26.236
210.00	394.90	1108.42	668.26	24.577	290.00	544.13	1524.12	917.63	26.254
211.00	396.76	1113.61	671.38	24.601	291.00	546.00	1529.32	920.75	26.272
212.00	398.63	1118.81	674.50	24.626	292.00	547.86	1534.52	923.87	26.290
213.00	400.49	1124.01	677.62	24.651	293.00	549.73	1539.71	926.98	26.308
214.00	402.36	1129.21	680.74	24.675	294.00	551.59	1544.91	930.10	26.325
215.00	404.23	1134.41	683.85	24.699	295.00	553.46	1550.10	933.22	26.343
216.00	406.09	1139.60	686.97	24.723	296.00	555.32	1555.30	936.33	26.360
217.00	407.96	1144.80	690.09	24.747	297.00	557.19	1560.49	939.45	26.378
218.00	409.82	1150.00	693.21	24.771	298.00	559.05	1565.69	942.57	26.395
219.00	411.69	1155.20	696.32	24.795	299.00	560.91	1570.88	945.68	26.413
220.00	413.56	1160.39	699.44	24.819	300.00	562.78	1576.08	948.80	26.430

12.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	6.20	12.09	4.55	2.010
4.00	6.43	14.35	6.53	2.680
5.00	6.78	17.37	9.13	3.373
6.00	7.31	21.31	12.43	4.087
7.00	8.13	26.23	16.34	4.846
8.00	9.42	32.59	21.13	5.692
9.00	11.25	40.22	26.53	6.590
10.00	13.40	48.06	31.76	7.417
11.00	15.61	55.54	36.56	8.130
12.00	17.79	62.61	40.98	8.746
13.00	19.92	69.35	45.12	9.285
14.00	22.00	75.83	49.08	9.766
15.00	24.04	82.12	52.89	10.199
16.00	26.04	88.25	56.59	10.595
17.00	28.01	94.26	60.20	10.960
18.00	29.95	100.18	63.76	11.298
19.00	31.88	106.01	67.25	11.613
20.00	33.78	111.78	70.71	11.909
21.00	35.66	117.49	74.13	12.188
22.00	37.53	123.16	77.52	12.451
23.00	39.39	128.78	80.88	12.701
24.00	41.24	134.37	84.22	12.939
25.00	43.08	139.92	87.54	13.166
26.00	44.90	145.45	90.85	13.383
27.00	46.73	150.95	94.14	13.590
28.00	48.54	156.44	97.42	13.790
29.00	50.35	161.90	100.68	13.982
30.00	52.15	167.34	103.94	14.166
31.00	53.94	172.77	107.18	14.344
32.00	55.73	178.19	110.42	14.516
33.00	57.52	183.59	113.65	14.682
34.00	59.30	188.98	116.88	14.843
35.00	61.08	194.36	120.09	14.999
36.00	62.86	199.73	123.30	15.150
37.00	64.63	205.09	126.51	15.297
38.00	66.40	210.45	129.71	15.440
39.00	68.16	215.79	132.91	15.579
40.00	69.93	221.13	136.10	15.714
41.00	71.69	226.46	139.29	15.846
42.00	73.45	231.78	142.48	15.974
43.00	75.20	237.10	145.66	16.099
44.00	76.96	242.41	148.84	16.221
45.00	78.71	247.72	152.02	16.341
46.00	80.46	253.03	155.19	16.457
47.00	82.21	258.33	158.36	16.571
48.00	83.96	263.62	161.53	16.683
49.00	85.70	268.91	164.70	16.792
50.00	87.45	274.20	167.87	16.899
51.00	89.19	279.48	171.03	17.003
52.00	90.94	284.76	174.19	17.106
53.00	92.68	290.04	177.35	17.206
54.00	94.42	295.31	180.51	17.305
55.00	96.16	300.59	183.67	17.402
56.00	97.89	305.85	186.82	17.496
57.00	99.63	311.12	189.97	17.590
58.00	101.37	316.38	193.13	17.681
59.00	103.10	321.65	196.28	17.771
60.00	104.84	326.90	199.43	17.860
61.00	106.57	332.16	202.58	17.946
62.00	108.31	337.42	205.73	18.032
63.00	110.04	342.67	208.87	18.116
64.00	111.77	347.92	212.02	18.199
65.00	113.50	353.17	215.16	18.280
66.00	115.23	358.42	218.31	18.360
67.00	116.96	363.67	221.45	18.439
68.00	118.69	368.91	224.59	18.517
69.00	120.42	374.16	227.73	18.593
70.00	122.15	379.40	230.88	18.669
71.00	123.87	384.64	234.02	18.743
72.00	125.60	389.88	237.16	18.816
73.00	127.33	395.12	240.29	18.889
74.00	129.05	400.35	243.43	18.960
75.00	130.78	405.59	246.57	19.030
76.00	132.51	410.83	249.71	19.100
77.00	134.23	416.06	252.84	19.168
78.00	135.96	421.29	255.98	19.235
79.00	137.68	426.52	259.12	19.302
80.00	139.40	431.76	262.25	19.368
81.00	141.13	436.99	265.39	19.433
82.00	142.85	442.22	268.52	19.497
83.00	144.57	447.44	271.65	19.560
84.00	146.30	452.67	274.79	19.623
85.00	148.02	457.90	277.92	19.685
86.00	149.74	463.12	281.05	19.746
87.00	151.46	468.35	284.18	19.806
88.00	153.18	473.57	287.32	19.866
89.00	154.90	478.80	290.45	19.925
90.00	156.62	484.02	293.58	19.984
91.00	158.34	489.24	296.71	20.041
92.00	160.06	494.47	299.84	20.098
93.00	161.78	499.69	302.97	20.155
94.00	163.50	504.91	306.10	20.211
95.00	165.22	510.13	309.23	20.266
96.00	166.94	515.35	312.36	20.321
97.00	168.66	520.57	315.49	20.375
98.00	170.38	525.79	318.61	20.428
99.00	172.10	531.00	321.74	20.481
100.00	173.82	536.22	324.87	20.534
101.00	175.54	541.44	328.00	20.585
102.00	177.25	546.66	331.13	20.637
103.00	178.97	551.87	334.25	20.688
104.00	180.69	557.09	337.38	20.738
105.00	182.41	562.30	340.51	20.788
106.00	184.13	567.52	343.63	20.837
107.00	185.84	572.73	346.76	20.886
108.00	187.56	577.95	349.89	20.935
109.00	189.28	583.16	353.01	20.983
110.00	190.99	588.37	356.14	21.031
111.00	192.71	593.59	359.26	21.078
112.00	194.43	598.80	362.39	21.125
113.00	196.14	604.01	365.51	21.171
114.00	197.86	609.22	368.64	21.217
115.00	199.58	614.43	371.76	21.262
116.00	201.29	619.65	374.89	21.307
117.00	203.01	624.86	378.01	21.352
118.00	204.72	630.07	381.14	21.396
119.00	206.44	635.28	384.26	21.440
120.00	208.15	640.49	387.39	21.484
121.00	209.87	645.70	390.51	21.527
122.00	211.59	650.91	393.63	21.570
123.00	213.30	656.12	396.76	21.613
124.00	215.02	661.33	399.88	21.655
125.00	216.73	666.53	403.00	21.697
126.00	218.45	671.74	406.13	21.738
127.00	220.16	676.95	409.25	21.779
128.00	221.88	682.16	412.37	21.820
129.00	223.59	687.37	415.50	21.861
130.00	225.30	692.58	418.62	21.901
131.00	227.02	697.78	421.74	21.941
132.00	228.73	702.99	424.87	21.980
133.00	230.45	708.20	427.99	22.020
134.00	232.16	713.40	431.11	22.059
135.00	233.88	718.61	434.23	22.097
136.00	235.59	723.82	437.35	22.136
137.00	237.30	729.02	440.48	22.174
138.00	239.02	734.23	443.60	22.212
139.00	240.73	739.43	446.72	22.250
140.00	242.45	744.64	449.84	22.287

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	244.16	749.84	452.96	22.324	221.00	381.10	1165.90	702.51	24.661
142.00	245.87	755.05	456.09	22.361	222.00	382.81	1171.10	705.63	24.685
143.00	247.59	760.25	459.21	22.397	223.00	384.52	1176.30	708.75	24.708
144.00	249.30	765.46	462.33	22.433	224.00	386.23	1181.49	711.86	24.731
145.00	251.01	770.66	465.45	22.469	225.00	387.94	1186.69	714.98	24.754
146.00	252.73	775.87	468.57	22.505	226.00	389.65	1191.89	718.10	24.777
147.00	254.44	781.07	471.69	22.541	227.00	391.36	1197.09	721.22	24.800
148.00	256.15	786.28	474.81	22.576	228.00	393.07	1202.28	724.33	24.823
149.00	257.87	791.48	477.93	22.611	229.00	394.78	1207.48	727.45	24.846
150.00	259.58	796.69	481.06	22.646	230.00	396.49	1212.68	730.57	24.869
151.00	261.29	801.89	484.18	22.680	231.00	398.20	1217.88	733.69	24.891
152.00	263.00	807.09	487.30	22.715	232.00	399.91	1223.07	736.80	24.914
153.00	264.72	812.30	490.42	22.749	233.00	401.62	1228.27	739.92	24.936
154.00	266.43	817.50	493.54	22.783	234.00	403.34	1233.47	743.04	24.958
155.00	268.14	822.70	496.66	22.817	235.00	405.05	1238.67	746.16	24.980
156.00	269.86	827.91	499.78	22.850	236.00	406.76	1243.86	749.27	25.003
157.00	271.57	833.11	502.90	22.883	237.00	408.47	1249.06	752.39	25.024
158.00	273.28	838.31	506.02	22.916	238.00	410.18	1254.26	755.51	25.046
159.00	274.99	843.51	509.14	22.949	239.00	411.89	1259.45	758.63	25.068
160.00	276.71	848.72	512.26	22.982	240.00	413.60	1264.65	761.74	25.090
161.00	278.42	853.92	515.38	23.014	241.00	415.31	1269.85	764.86	25.111
162.00	280.13	859.12	518.50	23.046	242.00	417.02	1275.04	767.98	25.133
163.00	281.84	864.32	521.62	23.078	243.00	418.73	1280.24	771.10	25.154
164.00	283.56	869.53	524.74	23.110	244.00	420.44	1285.44	774.21	25.176
165.00	285.27	874.73	527.86	23.142	245.00	422.15	1290.63	777.33	25.197
166.00	286.98	879.93	530.98	23.173	246.00	423.86	1295.83	780.45	25.218
167.00	288.69	885.13	534.10	23.204	247.00	425.57	1301.03	783.57	25.239
168.00	290.40	890.33	537.22	23.236	248.00	427.28	1306.22	786.68	25.260
169.00	292.12	895.53	540.34	23.266	249.00	428.99	1311.42	789.80	25.281
170.00	293.83	900.74	543.46	23.297	250.00	430.70	1316.62	792.92	25.302
171.00	295.54	905.94	546.58	23.328	251.00	432.41	1321.81	796.04	25.323
172.00	297.25	911.14	549.70	23.358	252.00	434.12	1327.01	799.15	25.343
173.00	298.96	916.34	552.82	23.388	253.00	435.83	1332.21	802.27	25.364
174.00	300.68	921.54	555.94	23.418	254.00	437.54	1337.40	805.39	25.384
175.00	302.39	926.74	559.06	23.448	255.00	439.25	1342.60	808.50	25.405
176.00	304.10	931.94	562.18	23.477	256.00	440.96	1347.80	811.62	25.425
177.00	305.81	937.14	565.30	23.507	257.00	442.67	1352.99	814.74	25.446
178.00	307.52	942.34	568.42	23.536	258.00	444.38	1358.19	817.86	25.466
179.00	309.23	947.54	571.54	23.565	259.00	446.09	1363.39	820.97	25.486
180.00	310.95	952.74	574.65	23.594	260.00	447.80	1368.58	824.09	25.506
181.00	312.66	957.94	577.77	23.623	261.00	449.51	1373.78	827.21	25.526
182.00	314.37	963.14	580.89	23.652	262.00	451.22	1378.97	830.32	25.546
183.00	316.08	968.35	584.01	23.680	263.00	452.93	1384.17	833.44	25.565
184.00	317.79	973.55	587.13	23.709	264.00	454.64	1389.37	836.56	25.585
185.00	319.50	978.75	590.25	23.737	265.00	456.35	1394.56	839.67	25.605
186.00	321.22	983.95	593.37	23.765	266.00	458.06	1399.76	842.79	25.624
187.00	322.93	989.14	596.49	23.793	267.00	459.77	1404.96	845.91	25.644
188.00	324.64	994.34	599.61	23.820	268.00	461.48	1410.15	849.03	25.663
189.00	326.35	999.54	602.73	23.848	269.00	463.19	1415.35	852.14	25.683
190.00	328.06	1004.74	605.84	23.875	270.00	464.90	1420.54	855.26	25.702
191.00	329.77	1009.94	608.96	23.903	271.00	466.61	1425.74	858.38	25.721
192.00	331.48	1015.14	612.08	23.930	272.00	468.32	1430.94	861.49	25.740
193.00	333.20	1020.34	615.20	23.957	273.00	470.03	1436.13	864.61	25.759
194.00	334.91	1025.54	618.32	23.984	274.00	471.74	1441.33	867.73	25.778
195.00	336.62	1030.74	621.44	24.011	275.00	473.45	1446.52	870.84	25.797
196.00	338.33	1035.94	624.56	24.037	276.00	475.16	1451.72	873.96	25.816
197.00	340.04	1041.14	627.67	24.064	277.00	476.87	1456.92	877.08	25.835
198.00	341.75	1046.34	630.79	24.090	278.00	478.58	1462.11	880.19	25.854
199.00	343.46	1051.54	633.91	24.116	279.00	480.29	1467.31	883.31	25.872
200.00	345.17	1056.74	637.03	24.142	280.00	482.00	1472.50	886.43	25.891
201.00	346.88	1061.94	640.15	24.168	281.00	483.71	1477.70	889.55	25.909
202.00	348.59	1067.13	643.27	24.194	282.00	485.41	1482.89	892.66	25.928
203.00	350.31	1072.33	646.38	24.220	283.00	487.12	1488.09	895.78	25.946
204.00	352.02	1077.53	649.50	24.245	284.00	488.83	1493.29	898.90	25.965
205.00	353.73	1082.73	652.62	24.271	285.00	490.54	1498.48	902.01	25.983
206.00	355.44	1087.93	655.74	24.296	286.00	492.25	1503.68	905.13	26.001
207.00	357.15	1093.13	658.86	24.321	287.00	493.96	1508.87	908.25	26.019
208.00	358.86	1098.33	661.98	24.346	288.00	495.67	1514.07	911.36	26.037
209.00	360.57	1103.52	665.09	24.371	289.00	497.38	1519.26	914.48	26.055
210.00	362.28	1108.72	668.21	24.396	290.00	499.09	1524.46	917.60	26.073
211.00	363.99	1113.92	671.33	24.421	291.00	500.80	1529.65	920.71	26.091
212.00	365.70	1119.12	674.45	24.445	292.00	502.51	1534.85	923.83	26.109
213.00	367.41	1124.32	677.57	24.470	293.00	504.22	1540.05	926.95	26.127
214.00	369.12	1129.52	680.68	24.494	294.00	505.93	1545.24	930.06	26.144
215.00	370.84	1134.71	683.80	24.518	295.00	507.64	1550.44	933.18	26.162
216.00	372.55	1139.91	686.92	24.542	296.00	509.35	1555.63	936.30	26.180
217.00	374.26	1145.11	690.04	24.566	297.00	511.06	1560.83	939.41	26.197
218.00	375.97	1150.31	693.16	24.590	298.00	512.77	1566.02	942.53	26.215
219.00	377.68	1155.51	696.27	24.614	299.00	514.48	1571.22	945.65	26.232
220.00	379.39	1160.70	699.39	24.638	300.00	516.19	1576.41	948.76	26.249

13.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	6.15	12.66	4.55	1.992
4.00	6.37	14.88	6.49	2.652
5.00	6.70	17.84	9.02	3.332
6.00	7.18	21.67	12.21	4.024
7.00	7.91	26.36	15.93	4.748
8.00	9.02	32.35	20.46	5.546
9.00	10.57	39.60	25.67	6.399
10.00	12.45	47.26	30.85	7.206
11.00	14.44	54.72	35.69	7.917
12.00	16.44	61.83	40.18	8.536
13.00	18.40	68.63	44.39	9.080
14.00	20.32	75.17	48.40	9.565
15.00	22.21	81.51	52.26	10.003
16.00	24.06	87.69	56.00	10.402
17.00	25.89	93.75	59.65	10.769
18.00	27.69	99.70	63.23	11.109
19.00	29.47	105.58	66.76	11.427
20.00	31.23	111.38	70.24	11.725
21.00	32.98	117.12	73.68	12.005
22.00	34.71	122.81	77.09	12.270
23.00	36.43	128.46	80.47	12.521
24.00	38.14	134.07	83.83	12.760
25.00	39.85	139.65	87.16	12.987
26.00	41.54	145.20	90.48	13.205
27.00	43.22	150.72	93.79	13.413
28.00	44.90	156.22	97.07	13.613
29.00	46.58	161.70	100.35	13.806
30.00	48.24	167.17	103.62	13.991
31.00	49.91	172.61	106.87	14.169
32.00	51.56	178.04	110.12	14.342
33.00	53.22	183.46	113.36	14.508
34.00	54.87	188.86	116.59	14.670
35.00	56.51	194.25	119.81	14.826
36.00	58.15	199.64	123.03	14.978
37.00	59.79	205.01	126.25	15.125
38.00	61.43	210.37	129.45	15.268
39.00	63.06	215.73	132.66	15.407
40.00	64.69	221.07	135.86	15.542
41.00	66.32	226.41	139.05	15.674
42.00	67.95	231.75	142.24	15.803
43.00	69.57	237.07	145.43	15.928
44.00	71.19	242.40	148.62	16.051
45.00	72.81	247.71	151.80	16.170
46.00	74.43	253.02	154.98	16.287
47.00	76.05	258.33	158.15	16.401
48.00	77.67	263.63	161.33	16.512
49.00	79.28	268.93	164.50	16.622
50.00	80.89	274.22	167.67	16.729
51.00	82.51	279.51	170.83	16.833
52.00	84.12	284.80	174.00	16.936
53.00	85.73	290.08	177.16	17.037
54.00	87.33	295.36	180.32	17.135
55.00	88.94	300.64	183.48	17.232
56.00	90.55	305.91	186.64	17.327
57.00	92.15	311.19	189.80	17.421
58.00	93.76	316.46	192.95	17.512
59.00	95.36	321.72	196.11	17.602
60.00	96.96	326.99	199.26	17.691
61.00	98.57	332.25	202.41	17.778
62.00	100.17	337.51	205.56	17.863
63.00	101.77	342.77	208.71	17.947
64.00	103.37	348.02	211.86	18.030
65.00	104.97	353.28	215.01	18.112
66.00	106.57	358.53	218.15	18.192
67.00	108.16	363.78	221.30	18.271
68.00	109.76	369.03	224.44	18.348
69.00	111.36	374.27	227.59	18.425
70.00	112.96	379.52	230.73	18.501
71.00	114.55	384.77	233.87	18.575
72.00	116.15	390.01	237.01	18.648
73.00	117.74	395.25	240.15	18.721
74.00	119.34	400.49	243.29	18.792
75.00	120.93	405.73	246.43	18.862
76.00	122.52	410.97	249.57	18.932
77.00	124.12	416.21	252.71	19.000
78.00	125.71	421.44	255.85	19.068
79.00	127.30	426.68	258.98	19.134
80.00	128.90	431.91	262.12	19.200
81.00	130.49	437.14	265.26	19.265
82.00	132.08	442.38	268.39	19.329
83.00	133.67	447.61	271.53	19.393
84.00	135.26	452.84	274.66	19.455
85.00	136.85	458.07	277.80	19.517
86.00	138.44	463.29	280.93	19.578
87.00	140.03	468.52	284.06	19.639
88.00	141.62	473.75	287.20	19.699
89.00	143.21	478.98	290.33	19.758
90.00	144.80	484.20	293.46	19.816
91.00	146.39	489.43	296.59	19.874
92.00	147.98	494.65	299.72	19.931
93.00	149.57	499.87	302.86	19.987
94.00	151.16	505.10	305.99	20.043
95.00	152.74	510.32	309.12	20.098
96.00	154.33	515.54	312.25	20.153
97.00	155.92	520.76	315.38	20.207
98.00	157.51	525.98	318.51	20.261
99.00	159.09	531.20	321.64	20.314
100.00	160.68	536.42	324.76	20.366
101.00	162.27	541.64	327.89	20.418
102.00	163.85	546.86	331.02	20.470
103.00	165.44	552.08	334.15	20.521
104.00	167.03	557.30	337.28	20.571
105.00	168.61	562.51	340.41	20.621
106.00	170.20	567.73	343.53	20.670
107.00	171.78	572.95	346.66	20.719
108.00	173.37	578.16	349.79	20.768
109.00	174.96	583.38	352.91	20.816
110.00	176.54	588.59	356.04	20.863
111.00	178.13	593.81	359.17	20.911
112.00	179.71	599.02	362.29	20.957
113.00	181.30	604.23	365.42	21.004
114.00	182.88	609.45	368.55	21.050
115.00	184.47	614.66	371.67	21.095
116.00	186.05	619.87	374.80	21.140
117.00	187.63	625.09	377.92	21.185
118.00	189.22	630.30	381.05	21.229
119.00	190.80	635.51	384.17	21.273
120.00	192.39	640.72	387.30	21.317
121.00	193.97	645.93	390.42	21.360
122.00	195.56	651.14	393.55	21.403
123.00	197.14	656.35	396.67	21.446
124.00	198.72	661.56	399.80	21.488
125.00	200.31	666.77	402.92	21.530
126.00	201.89	671.98	406.04	21.571
127.00	203.47	677.19	409.17	21.612
128.00	205.06	682.40	412.29	21.653
129.00	206.64	687.61	415.41	21.694
130.00	208.22	692.82	418.54	21.734
131.00	209.81	698.03	421.66	21.774
132.00	211.39	703.24	424.78	21.814
133.00	212.97	708.45	427.91	21.853
134.00	214.55	713.65	431.03	21.892
135.00	216.14	718.86	434.15	21.931
136.00	217.72	724.07	437.28	21.969
137.00	219.30	729.28	440.40	22.007
138.00	220.88	734.48	443.52	22.045
139.00	222.47	739.69	446.64	22.083
140.00	224.05	744.90	449.77	22.120

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	225.63	750.10	452.89	22.157	221.00	352.06	1166.21	702.46	24.495
142.00	227.21	755.31	456.01	22.194	222.00	353.64	1171.41	705.58	24.518
143.00	228.80	760.51	459.13	22.230	223.00	355.22	1176.61	708.70	24.542
144.00	230.38	765.72	462.25	22.267	224.00	356.80	1181.81	711.81	24.565
145.00	231.96	770.93	465.38	22.303	225.00	358.37	1187.00	714.93	24.588
146.00	233.54	776.13	468.50	22.338	226.00	359.95	1192.20	718.05	24.611
147.00	235.12	781.34	471.62	22.374	227.00	361.53	1197.40	721.17	24.634
148.00	236.70	786.54	474.74	22.409	228.00	363.11	1202.60	724.29	24.657
149.00	238.29	791.75	477.86	22.444	229.00	364.69	1207.80	727.40	24.680
150.00	239.87	796.95	480.98	22.479	230.00	366.27	1212.99	730.52	24.702
151.00	241.45	802.16	484.10	22.514	231.00	367.85	1218.19	733.64	24.725
152.00	243.03	807.36	487.23	22.548	232.00	369.43	1223.39	736.76	24.747
153.00	244.61	812.57	490.35	22.582	233.00	371.01	1228.59	739.87	24.770
154.00	246.19	817.77	493.47	22.616	234.00	372.58	1233.78	742.99	24.792
155.00	247.77	822.97	496.59	22.650	235.00	374.16	1238.98	746.11	24.814
156.00	249.36	828.18	499.71	22.683	236.00	375.74	1244.18	749.23	24.836
157.00	250.94	833.38	502.83	22.717	237.00	377.32	1249.38	752.35	24.858
158.00	252.52	838.58	505.95	22.750	238.00	378.90	1254.57	755.46	24.880
159.00	254.10	843.79	509.07	22.782	239.00	380.48	1259.77	758.58	24.902
160.00	255.68	848.99	512.19	22.815	240.00	382.06	1264.97	761.70	24.923
161.00	257.26	854.19	515.31	22.847	241.00	383.64	1270.17	764.82	24.945
162.00	258.84	859.40	518.43	22.880	242.00	385.22	1275.36	767.93	24.967
163.00	260.42	864.60	521.55	22.912	243.00	386.79	1280.56	771.05	24.988
164.00	262.00	869.80	524.68	22.943	244.00	388.37	1285.76	774.17	25.009
165.00	263.59	875.01	527.80	22.975	245.00	389.95	1290.95	777.29	25.031
166.00	265.17	880.21	530.92	23.007	246.00	391.53	1296.15	780.40	25.052
167.00	266.75	885.41	534.04	23.038	247.00	393.11	1301.35	783.52	25.073
168.00	268.33	890.61	537.16	23.069	248.00	394.69	1306.55	786.64	25.094
169.00	269.91	895.82	540.28	23.100	249.00	396.27	1311.74	789.76	25.115
170.00	271.49	901.02	543.40	23.130	250.00	397.85	1316.94	792.87	25.136
171.00	273.07	906.22	546.52	23.161	251.00	399.42	1322.14	795.99	25.156
172.00	274.65	911.42	549.64	23.191	252.00	401.00	1327.33	799.11	25.177
173.00	276.23	916.62	552.76	23.221	253.00	402.58	1332.53	802.23	25.198
174.00	277.81	921.83	555.88	23.251	254.00	404.16	1337.73	805.34	25.218
175.00	279.39	927.03	559.00	23.281	255.00	405.74	1342.92	808.46	25.238
176.00	280.97	932.23	562.12	23.311	256.00	407.32	1348.12	811.58	25.259
177.00	282.55	937.43	565.24	23.340	257.00	408.90	1353.32	814.70	25.279
178.00	284.13	942.63	568.35	23.370	258.00	410.47	1358.51	817.81	25.299
179.00	285.71	947.83	571.47	23.399	259.00	412.05	1363.71	820.93	25.319
180.00	287.29	953.03	574.59	23.428	260.00	413.63	1368.91	824.05	25.339
181.00	288.87	958.23	577.71	23.457	261.00	415.21	1374.10	827.16	25.359
182.00	290.45	963.44	580.83	23.485	262.00	416.79	1379.30	830.28	25.379
183.00	292.03	968.64	583.95	23.514	263.00	418.37	1384.50	833.40	25.399
184.00	293.61	973.84	587.07	23.542	264.00	419.95	1389.69	836.52	25.419
185.00	295.19	979.04	590.19	23.570	265.00	421.52	1394.89	839.63	25.438
186.00	296.77	984.24	593.31	23.598	266.00	423.10	1400.09	842.75	25.458
187.00	298.35	989.44	596.43	23.626	267.00	424.68	1405.28	845.87	25.477
188.00	299.93	994.64	599.55	23.654	268.00	426.26	1410.48	848.98	25.497
189.00	301.51	999.84	602.67	23.681	269.00	427.84	1415.68	852.10	25.516
190.00	303.09	1005.04	605.79	23.709	270.00	429.42	1420.87	855.22	25.535
191.00	304.67	1010.24	608.91	23.736	271.00	430.99	1426.07	858.34	25.555
192.00	306.25	1015.44	612.02	23.763	272.00	432.57	1431.26	861.45	25.574
193.00	307.83	1020.64	615.14	23.790	273.00	434.15	1436.46	864.57	25.593
194.00	309.41	1025.84	618.26	23.817	274.00	435.73	1441.66	867.69	25.612
195.00	310.99	1031.04	621.38	23.844	275.00	437.31	1446.85	870.80	25.631
196.00	312.57	1036.24	624.50	23.871	276.00	438.89	1452.05	873.92	25.650
197.00	314.15	1041.44	627.62	23.897	277.00	440.47	1457.25	877.04	25.668
198.00	315.73	1046.64	630.74	23.923	278.00	442.04	1462.44	880.16	25.687
199.00	317.31	1051.84	633.86	23.950	279.00	443.62	1467.64	883.27	25.706
200.00	318.89	1057.04	636.97	23.976	280.00	445.20	1472.83	886.39	25.724
201.00	320.47	1062.24	640.09	24.002	281.00	446.78	1478.03	889.51	25.743
202.00	322.05	1067.44	643.21	24.027	282.00	448.36	1483.23	892.62	25.761
203.00	323.63	1072.64	646.33	24.053	283.00	449.94	1488.42	895.74	25.780
204.00	325.21	1077.83	649.45	24.079	284.00	451.51	1493.62	898.86	25.798
205.00	326.79	1083.03	652.57	24.104	285.00	453.09	1498.81	901.97	25.816
206.00	328.37	1088.23	655.69	24.129	286.00	454.67	1504.01	905.09	25.835
207.00	329.95	1093.43	658.80	24.154	287.00	456.25	1509.21	908.21	25.853
208.00	331.53	1098.63	661.92	24.180	288.00	457.83	1514.40	911.32	25.871
209.00	333.11	1103.83	665.04	24.204	289.00	459.40	1519.60	914.44	25.889
210.00	334.69	1109.03	668.16	24.229	290.00	460.98	1524.79	917.56	25.907
211.00	336.27	1114.23	671.28	24.254	291.00	462.56	1529.99	920.67	25.925
212.00	337.84	1119.43	674.40	24.279	292.00	464.14	1535.18	923.79	25.943
213.00	339.42	1124.62	677.51	24.303	293.00	465.72	1540.38	926.91	25.960
214.00	341.00	1129.82	680.63	24.327	294.00	467.30	1545.58	930.03	25.978
215.00	342.58	1135.02	683.75	24.352	295.00	468.87	1550.77	933.14	25.996
216.00	344.16	1140.22	686.87	24.376	296.00	470.45	1555.97	936.26	26.013
217.00	345.74	1145.42	689.99	24.400	297.00	472.03	1561.16	939.38	26.031
218.00	347.32	1150.62	693.11	24.424	298.00	473.61	1566.36	942.49	26.048
219.00	348.90	1155.82	696.22	24.447	299.00	475.19	1571.55	945.61	26.066
220.00	350.48	1161.01	699.34	24.471	300.00	476.77	1576.75	948.73	26.083

14.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	6.11	13.23	4.56	1.974
4.00	6.32	15.42	6.46	2.626
5.00	6.63	18.33	8.93	3.293
6.00	7.07	22.05	12.02	3.967
7.00	7.73	26.55	15.58	4.663
8.00	8.70	32.24	19.90	5.420
9.00	10.04	39.15	24.91	6.233
10.00	11.68	46.60	30.02	7.018
11.00	13.48	54.00	34.88	7.724
12.00	15.30	61.13	39.42	8.344
13.00	17.12	67.96	43.68	8.891
14.00	18.90	74.55	47.74	9.379
15.00	20.65	80.94	51.64	9.820
16.00	22.38	87.17	55.42	10.222
17.00	24.08	93.26	59.11	10.592
18.00	25.75	99.26	62.72	10.934
19.00	27.41	105.16	66.28	11.254
20.00	29.06	111.00	69.7[illegible]	11.553
21.00	30.68	116.77	73.24	11.835
22.00	32.30	122.49	76.67	12.101
23.00	33.90	128.16	80.07	12.353
24.00	35.50	133.80	83.44	12.593
25.00	37.08	139.40	86.79	12.821
26.00	38.66	144.97	90.12	13.040
27.00	40.23	150.51	93.44	13.249
28.00	41.79	156.03	96.74	13.450
29.00	43.35	161.52	100.03	13.642
30.00	44.90	167.00	103.30	13.828
31.00	46.45	172.46	106.57	14.007
32.00	47.99	177.90	109.82	14.180
33.00	49.53	183.33	113.07	14.347
34.00	51.07	188.75	116.31	14.509
35.00	52.60	194.15	119.54	14.665
36.00	54.13	199.55	122.77	14.817
37.00	55.65	204.93	125.99	14.965
38.00	57.17	210.30	129.20	15.108
39.00	58.69	215.67	132.41	15.248
40.00	60.21	221.03	135.61	15.383
41.00	61.72	226.38	138.81	15.515
42.00	63.24	231.72	142.01	15.644
43.00	64.75	237.05	145.20	15.770
44.00	66.26	242.38	148.39	15.892
45.00	67.76	247.71	151.58	16.012
46.00	69.27	253.03	154.76	16.129
47.00	70.77	258.34	157.94	16.243
48.00	72.28	263.65	161.12	16.355
49.00	73.78	268.95	164.29	16.464
50.00	75.28	274.25	167.47	16.571
51.00	76.78	279.55	170.64	16.676
52.00	78.27	284.84	173.81	16.779
53.00	79.77	290.13	176.97	16.880
54.00	81.26	295.42	180.14	16.978
55.00	82.76	300.70	183.30	17.075
56.00	84.25	305.98	186.46	17.170
57.00	85.74	311.26	189.62	17.264
58.00	87.24	316.53	192.78	17.356
59.00	88.73	321.80	195.93	17.446
60.00	90.22	327.07	199.09	17.534
61.00	91.71	332.34	202.24	17.621
62.00	93.19	337.60	205.40	17.707
63.00	94.68	342.86	208.55	17.791
64.00	96.17	348.12	211.70	17.874
65.00	97.66	353.38	214.85	17.955
66.00	99.14	358.64	218.00	18.036
67.00	100.63	363.89	221.15	18.115
68.00	102.11	369.14	224.29	18.192
69.00	103.59	374.40	227.44	18.269
70.00	105.08	379.65	230.58	18.345
71.00	106.56	384.89	233.73	18.419
72.00	108.04	390.14	236.87	18.492
73.00	109.53	395.39	240.01	18.565
74.00	111.01	400.63	243.15	18.636
75.00	112.49	405.87	246.30	18.707
76.00	113.97	411.11	249.44	18.776
77.00	115.45	416.35	252.58	18.844
78.00	116.93	421.59	255.71	18.912
79.00	118.41	426.83	258.85	18.979
80.00	119.89	432.07	261.99	19.045
81.00	121.37	437.30	265.13	19.110
82.00	122.85	442.54	268.27	19.174
83.00	124.33	447.77	271.40	19.237
84.00	125.80	453.00	274.54	19.300
85.00	127.28	458.24	277.67	19.362
86.00	128.76	463.47	280.81	19.423
87.00	130.24	468.70	283.94	19.484
88.00	131.71	473.93	287.08	19.543
89.00	133.19	479.15	290.21	19.602
90.00	134.67	484.38	293.35	19.661
91.00	136.14	489.61	296.48	19.719
92.00	137.62	494.84	299.61	19.776
93.00	139.10	500.06	302.74	19.832
94.00	140.57	505.29	305.87	19.888
95.00	142.05	510.51	309.01	19.943
96.00	143.52	515.74	312.14	19.998
97.00	145.00	520.96	315.27	20.052
98.00	146.47	526.18	318.40	20.106
99.00	147.95	531.40	321.53	20.159
100.00	149.42	536.62	324.66	20.211
101.00	150.89	541.85	327.79	20.263
102.00	152.37	547.07	330.92	20.315
103.00	153.84	552.29	334.05	20.366
104.00	155.32	557.50	337.18	20.416
105.00	156.79	562.72	340.31	20.466
106.00	158.26	567.94	343.43	20.515
107.00	159.73	573.16	346.56	20.564
108.00	161.21	578.38	349.69	20.613
109.00	162.68	583.59	352.82	20.661
110.00	164.15	588.81	355.94	20.709
111.00	165.63	594.03	359.07	20.756
112.00	167.10	599.24	362.20	20.803
113.00	168.57	604.46	365.33	20.849
114.00	170.04	609.67	368.45	20.895
115.00	171.51	614.89	371.58	20.941
116.00	172.99	620.10	374.71	20.986
117.00	174.46	625.32	377.83	21.030
118.00	175.93	630.53	380.96	21.075
119.00	177.40	635.74	384.08	21.119
120.00	178.87	640.96	387.21	21.162
121.00	180.34	646.17	390.33	21.206
122.00	181.82	651.38	393.46	21.249
123.00	183.29	656.59	396.58	21.291
124.00	184.76	661.80	399.71	21.333
125.00	186.23	667.01	402.83	21.375
126.00	187.70	672.23	405.96	21.417
127.00	189.17	677.44	409.08	21.458
128.00	190.64	682.65	412.21	21.499
129.00	192.11	687.86	415.33	21.539
130.00	193.58	693.07	418.46	21.580
131.00	195.05	698.28	421.58	21.619
132.00	196.52	703.49	424.70	21.659
133.00	197.99	708.70	427.83	21.698
134.00	199.46	713.90	430.95	21.737
135.00	200.93	719.11	434.07	21.776
136.00	202.40	724.32	437.20	21.815
137.00	203.87	729.53	440.32	21.853
138.00	205.34	734.74	443.44	21.891
139.00	206.81	739.95	446.57	21.928
140.00	208.28	745.15	449.69	21.966

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	209.75	750.36	452.81	22.003	221.00	327.16	1166.52	702.41	24.341
142.00	211.22	755.57	455.93	22.039	222.00	328.63	1171.72	705.53	24.364
143.00	212.69	760.77	459.06	22.076	223.00	330.10	1176.92	708.65	24.387
144.00	214.16	765.98	462.18	22.112	224.00	331.56	1182.12	711.77	24.411
145.00	215.63	771.19	465.30	22.148	225.00	333.03	1187.32	714.88	24.434
146.00	217.10	776.39	468.42	22.184	226.00	334.50	1192.51	718.00	24.457
147.00	218.57	781.60	471.55	22.220	227.00	335.96	1197.71	721.12	24.480
148.00	220.03	786.81	474.67	22.255	228.00	337.43	1202.91	724.24	24.503
149.00	221.50	792.01	477.79	22.290	229.00	338.90	1208.11	727.36	24.525
150.00	222.97	797.22	480.91	22.325	230.00	340.36	1213.31	730.47	24.548
151.00	224.44	802.42	484.03	22.359	231.00	341.83	1218.51	733.59	24.571
152.00	225.91	807.63	487.16	22.394	232.00	343.30	1223.70	736.71	24.593
153.00	227.38	812.83	490.28	22.428	233.00	344.76	1228.90	739.83	24.615
154.00	228.85	818.04	493.40	22.462	234.00	346.23	1234.10	742.95	24.638
155.00	230.32	823.24	496.52	22.495	235.00	347.69	1239.30	746.06	24.660
156.00	231.79	828.45	499.64	22.529	236.00	349.16	1244.50	749.18	24.682
157.00	233.25	833.65	502.76	22.562	237.00	350.63	1249.69	752.30	24.704
158.00	234.72	838.86	505.88	22.595	238.00	352.09	1254.89	755.42	24.726
159.00	236.19	844.06	509.00	22.628	239.00	353.56	1260.09	758.54	24.748
160.00	237.66	849.27	512.13	22.661	240.00	355.03	1265.29	761.65	24.769
161.00	239.13	854.47	515.25	22.693	241.00	356.49	1270.48	764.77	24.791
162.00	240.60	859.67	518.37	22.725	242.00	357.96	1275.68	767.89	24.812
163.00	242.06	864.88	521.49	22.757	243.00	359.42	1280.88	771.01	24.834
164.00	243.53	870.08	524.61	22.789	244.00	360.89	1286.08	774.12	24.855
165.00	245.00	875.29	527.73	22.821	245.00	362.36	1291.27	777.24	24.876
166.00	246.47	880.49	530.85	22.852	246.00	363.82	1296.47	780.36	24.898
167.00	247.94	885.69	533.97	22.883	247.00	365.29	1301.67	783.48	24.919
168.00	249.41	890.89	537.09	22.915	248.00	366.75	1306.87	786.59	24.940
169.00	250.87	896.10	540.21	22.945	249.00	368.22	1312.06	789.71	24.961
170.00	252.34	901.30	543.33	22.976	250.00	369.69	1317.26	792.83	24.981
171.00	253.81	906.50	546.45	23.007	251.00	371.15	1322.46	795.95	25.002
172.00	255.28	911.71	549.57	23.037	252.00	372.62	1327.66	799.06	25.023
173.00	256.74	916.91	552.69	23.067	253.00	374.08	1332.85	802.18	25.043
174.00	258.21	922.11	555.81	23.097	254.00	375.55	1338.05	805.30	25.064
175.00	259.68	927.31	558.93	23.127	255.00	377.02	1343.25	808.42	25.084
176.00	261.15	932.52	562.05	23.157	256.00	378.48	1348.44	811.53	25.105
177.00	262.62	937.72	565.17	23.186	257.00	379.95	1353.64	814.65	25.125
178.00	264.08	942.92	568.29	23.215	258.00	381.41	1358.84	817.77	25.145
179.00	265.55	948.12	571.41	23.244	259.00	382.88	1364.04	820.89	25.165
180.00	267.02	953.32	574.53	23.273	260.00	384.35	1369.23	824.00	25.185
181.00	268.49	958.52	577.65	23.302	261.00	385.81	1374.43	827.12	25.205
182.00	269.95	963.73	580.77	23.331	262.00	387.28	1379.63	830.24	25.225
183.00	271.42	968.93	583.89	23.359	263.00	388.74	1384.82	833.36	25.245
184.00	272.89	974.13	587.01	23.388	264.00	390.21	1390.02	836.47	25.265
185.00	274.36	979.33	590.13	23.416	265.00	391.68	1395.22	839.59	25.284
186.00	275.82	984.53	593.25	23.444	266.00	393.14	1400.41	842.71	25.304
187.00	277.29	989.73	596.37	23.472	267.00	394.61	1405.61	845.83	25.323
188.00	278.76	994.93	599.49	23.500	268.00	396.07	1410.81	848.94	25.343
189.00	280.23	1000.13	602.61	23.527	269.00	397.54	1416.00	852.06	25.362
190.00	281.69	1005.33	605.73	23.555	270.00	399.00	1421.20	855.18	25.381
191.00	283.16	1010.54	608.85	23.582	271.00	400.47	1426.40	858.30	25.401
192.00	284.63	1015.74	611.97	23.609	272.00	401.94	1431.59	861.41	25.420
193.00	286.09	1020.94	615.09	23.636	273.00	403.40	1436.79	864.53	25.439
194.00	287.56	1026.14	618.21	23.663	274.00	404.87	1441.99	867.65	25.458
195.00	289.03	1031.34	621.33	23.690	275.00	406.33	1447.18	870.76	25.477
196.00	290.50	1036.54	624.44	23.716	276.00	407.80	1452.38	873.88	25.496
197.00	291.96	1041.74	627.56	23.743	277.00	409.26	1457.58	877.00	25.514
198.00	293.43	1046.94	630.68	23.769	278.00	410.73	1462.77	880.12	25.533
199.00	294.90	1052.14	633.80	23.795	279.00	412.20	1467.97	883.23	25.552
200.00	296.36	1057.34	636.92	23.821	280.00	413.66	1473.16	886.35	25.570
201.00	297.83	1062.54	640.04	23.847	281.00	415.13	1478.36	889.47	25.589
202.00	299.30	1067.74	643.16	23.873	282.00	416.59	1483.56	892.58	25.607
203.00	300.76	1072.94	646.28	23.899	283.00	418.06	1488.75	895.70	25.626
204.00	302.23	1078.14	649.40	23.924	284.00	419.52	1493.95	898.82	25.644
205.00	303.70	1083.34	652.51	23.950	285.00	420.99	1499.15	901.93	25.662
206.00	305.16	1088.54	655.63	23.975	286.00	422.46	1504.34	905.05	25.681
207.00	306.63	1093.74	658.75	24.000	287.00	423.92	1509.54	908.17	25.699
208.00	308.10	1098.94	661.87	24.025	288.00	425.39	1514.73	911.29	25.717
209.00	309.57	1104.13	664.99	24.050	289.00	426.85	1519.93	914.40	25.735
210.00	311.03	1109.33	668.11	24.075	290.00	428.32	1525.13	917.52	25.753
211.00	312.50	1114.53	671.23	24.100	291.00	429.78	1530.32	920.64	25.771
212.00	313.97	1119.73	674.35	24.124	292.00	431.25	1535.52	923.75	25.788
213.00	315.43	1124.93	677.46	24.149	293.00	432.71	1540.71	926.87	25.806
214.00	316.90	1130.13	680.58	24.173	294.00	434.18	1545.91	929.99	25.824
215.00	318.37	1135.33	683.70	24.197	295.00	435.65	1551.11	933.10	25.842
216.00	319.83	1140.53	686.82	24.222	296.00	437.11	1556.30	936.22	25.859
217.00	321.30	1145.73	689.94	24.246	297.00	438.58	1561.50	939.34	25.877
218.00	322.77	1150.93	693.06	24.269	298.00	440.04	1566.69	942.46	25.894
219.00	324.23	1156.13	696.17	24.293	299.00	441.51	1571.89	945.57	25.912
220.00	325.70	1161.32	699.29	24.317	300.00	442.97	1577.09	948.69	25.929

15.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	6.07	13.79	4.56	1.957
4.00	6.27	15.96	6.43	2.601
5.00	6.56	18.82	8.85	3.257
6.00	6.97	22.45	11.85	3.914
7.00	7.57	26.79	15.28	4.586
8.00	8.43	32.24	19.42	5.311
9.00	9.60	38.85	24.26	6.089
10.00	11.06	46.08	29.27	6.851
11.00	12.67	53.39	34.12	7.547
12.00	14.35	60.50	38.69	8.166
13.00	16.02	67.36	43.00	8.715
14.00	17.68	73.98	47.11	9.206
15.00	19.32	80.41	51.05	9.650
16.00	20.93	86.67	54.86	10.054
17.00	22.52	92.81	58.58	10.426
18.00	24.09	98.84	62.22	10.771
19.00	25.64	104.78	65.80	11.092
20.00	27.18	110.64	69.33	11.393
21.00	28.70	116.44	72.81	11.676
22.00	30.22	122.18	76.26	11.943
23.00	31.72	127.88	79.67	12.196
24.00	33.21	133.54	83.06	12.437
25.00	34.69	139.16	86.42	12.666
26.00	36.17	144.74	89.77	12.886
27.00	37.64	150.30	93.10	13.095
28.00	39.10	155.84	96.41	13.297
29.00	40.56	161.35	99.71	13.490
30.00	42.01	166.85	102.99	13.676
31.00	43.46	172.32	106.26	13.856
32.00	44.90	177.78	109.53	14.029
33.00	46.34	183.22	112.78	14.197
34.00	47.78	188.65	116.03	14.359
35.00	49.21	194.06	119.27	14.516
36.00	50.64	199.47	122.50	14.668
37.00	52.06	204.86	125.73	14.816
38.00	53.49	210.25	128.95	14.959
39.00	54.91	215.62	132.16	15.099
40.00	56.33	220.99	135.37	15.235
41.00	57.74	226.34	138.58	15.367
42.00	59.16	231.70	141.78	15.496
43.00	60.57	237.04	144.98	15.622
44.00	61.98	242.38	148.17	15.744
45.00	63.39	247.71	151.36	15.864
46.00	64.80	253.03	154.55	15.981
47.00	66.20	258.35	157.73	16.096
48.00	67.61	263.67	160.92	16.208
49.00	69.01	268.98	164.09	16.317
50.00	70.41	274.29	167.27	16.424
51.00	71.81	279.59	170.44	16.529
52.00	73.21	284.89	173.62	16.632
53.00	74.61	290.18	176.79	16.733
54.00	76.01	295.47	179.95	16.832
55.00	77.40	300.76	183.12	16.929
56.00	78.80	306.05	186.28	17.024
57.00	80.19	311.33	189.45	17.118
58.00	81.58	316.61	192.61	17.210
59.00	82.98	321.88	195.77	17.300
60.00	84.37	327.16	198.92	17.388
61.00	85.76	332.43	202.08	17.475
62.00	87.15	337.70	205.24	17.561
63.00	88.54	342.96	208.39	17.645
64.00	89.93	348.23	211.54	17.728
65.00	91.32	353.49	214.69	17.810
66.00	92.71	358.75	217.84	17.890
67.00	94.09	364.01	220.99	17.969
68.00	95.48	369.26	224.14	18.047
69.00	96.87	374.52	227.29	18.124
70.00	98.25	379.77	230.44	18.199
71.00	99.64	385.02	233.58	18.274
72.00	101.02	390.27	236.73	18.347
73.00	102.41	395.52	239.87	18.420
74.00	103.79	400.77	243.02	18.491
75.00	105.17	406.02	246.16	18.562
76.00	106.56	411.26	249.30	18.631
77.00	107.94	416.50	252.44	18.700
78.00	109.32	421.74	255.58	18.767
79.00	110.70	426.99	258.72	18.834
80.00	112.09	432.22	261.86	18.900
81.00	113.47	437.46	265.00	18.965
82.00	114.85	442.70	268.14	19.029
83.00	116.23	447.94	271.28	19.093
84.00	117.61	453.17	274.42	19.155
85.00	118.99	458.41	277.55	19.217
86.00	120.37	463.64	280.69	19.279
87.00	121.75	468.87	283.82	19.339
88.00	123.13	474.10	286.96	19.399
89.00	124.51	479.34	290.10	19.458
90.00	125.89	484.57	293.23	19.516
91.00	127.26	489.79	296.36	19.574
92.00	128.64	495.02	299.50	19.631
93.00	130.02	500.25	302.63	19.688
94.00	131.40	505.48	305.76	19.744
95.00	132.78	510.70	308.90	19.799
96.00	134.15	515.93	312.03	19.854
97.00	135.53	521.16	315.16	19.908
98.00	136.91	526.38	318.29	19.961
99.00	138.28	531.60	321.42	20.014
100.00	139.66	536.83	324.55	20.067
101.00	141.04	542.05	327.69	20.119
102.00	142.41	547.27	330.82	20.170
103.00	143.79	552.49	333.95	20.221
104.00	145.17	557.71	337.08	20.272
105.00	146.54	562.94	340.21	20.322
106.00	147.92	568.16	343.33	20.371
107.00	149.29	573.37	346.46	20.420
108.00	150.67	578.59	349.59	20.469
109.00	152.04	583.81	352.72	20.517
110.00	153.42	589.03	355.85	20.565
111.00	154.79	594.25	358.98	20.612
112.00	156.17	599.47	362.11	20.659
113.00	157.54	604.68	365.23	20.705
114.00	158.92	609.90	368.36	20.751
115.00	160.29	615.12	371.49	20.796
116.00	161.66	620.33	374.61	20.842
117.00	163.04	625.55	377.74	20.886
118.00	164.41	630.76	380.87	20.931
119.00	165.79	635.98	383.99	20.975
120.00	167.16	641.19	387.12	21.018
121.00	168.53	646.40	390.25	21.062
122.00	169.91	651.62	393.37	21.105
123.00	171.28	656.83	396.50	21.147
124.00	172.65	662.04	399.62	21.189
125.00	174.03	667.26	402.75	21.231
126.00	175.40	672.47	405.87	21.273
127.00	176.77	677.68	409.00	21.314
128.00	178.15	682.89	412.12	21.355
129.00	179.52	688.10	415.25	21.395
130.00	180.89	693.31	418.37	21.436
131.00	182.26	698.52	421.50	21.476
132.00	183.64	703.74	424.62	21.515
133.00	185.01	708.95	427.75	21.554
134.00	186.38	714.16	430.87	21.594
135.00	187.75	719.37	433.99	21.632
136.00	189.13	724.58	437.12	21.671
137.00	190.50	729.78	440.24	21.709
138.00	191.87	734.99	443.37	21.747
139.00	193.24	740.20	446.49	21.784
140.00	194.61	745.41	449.61	21.822

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	195.99	750.62	452.74	21.859	221.00	305.59	1166.83	702.36	24.197
142.00	197.36	755.83	455.86	21.896	222.00	306.96	1172.03	705.48	24.220
143.00	198.73	761.04	458.98	21.932	223.00	308.33	1177.23	708.60	24.244
144.00	200.10	766.24	462.10	21.968	224.00	309.70	1182.43	711.72	24.267
145.00	201.47	771.45	465.23	22.004	225.00	311.07	1187.63	714.83	24.290
146.00	202.85	776.66	468.35	22.040	226.00	312.44	1192.83	717.95	24.313
147.00	204.22	781.87	471.47	22.076	227.00	313.80	1198.03	721.07	24.336
148.00	205.59	787.07	474.60	22.111	228.00	315.17	1203.23	724.19	24.359
149.00	206.96	792.28	477.72	22.146	229.00	316.54	1208.42	727.31	24.382
150.00	208.33	797.49	480.84	22.181	230.00	317.91	1213.62	730.43	24.405
151.00	209.70	802.69	483.96	22.216	231.00	319.28	1218.82	733.54	24.427
152.00	211.07	807.90	487.08	22.250	232.00	320.65	1224.02	736.66	24.450
153.00	212.44	813.10	490.21	22.284	233.00	322.02	1229.22	739.78	24.472
154.00	213.82	818.31	493.33	22.318	234.00	323.38	1234.42	742.90	24.494
155.00	215.19	823.52	496.45	22.352	235.00	324.75	1239.61	746.02	24.516
156.00	216.56	828.72	499.57	22.385	236.00	326.12	1244.81	749.14	24.538
157.00	217.93	833.93	502.69	22.418	237.00	327.49	1250.01	752.25	24.560
158.00	219.30	839.13	505.82	22.451	238.00	328.86	1255.21	755.37	24.582
159.00	220.67	844.34	508.94	22.484	239.00	330.23	1260.41	758.49	24.604
160.00	222.04	849.54	512.06	22.517	240.00	331.60	1265.61	761.61	24.626
161.00	223.41	854.75	515.18	22.549	241.00	332.96	1270.80	764.73	24.647
162.00	224.78	859.95	518.30	22.582	242.00	334.33	1276.00	767.84	24.669
163.00	226.15	865.16	521.42	22.614	243.00	335.70	1281.20	770.96	24.690
164.00	227.52	870.36	524.54	22.645	244.00	337.07	1286.40	774.08	24.712
165.00	228.89	875.56	527.66	22.677	245.00	338.44	1291.60	777.20	24.733
166.00	230.26	880.77	530.79	22.709	246.00	339.81	1296.79	780.31	24.754
167.00	231.64	885.97	533.91	22.740	247.00	341.18	1301.99	783.43	24.775
168.00	233.01	891.18	537.03	22.771	248.00	342.54	1307.19	786.55	24.796
169.00	234.38	896.38	540.15	22.802	249.00	343.91	1312.39	789.67	24.817
170.00	235.75	901.58	543.27	22.832	250.00	345.28	1317.58	792.79	24.838
171.00	237.12	906.79	546.39	22.863	251.00	346.65	1322.78	795.90	24.859
172.00	238.49	911.99	549.51	22.893	252.00	348.02	1327.98	799.02	24.879
173.00	239.86	917.19	552.63	22.923	253.00	349.39	1333.18	802.14	24.900
174.00	241.23	922.40	555.75	22.953	254.00	350.75	1338.37	805.26	24.920
175.00	242.60	927.60	558.87	22.983	255.00	352.12	1343.57	808.37	24.941
176.00	243.97	932.80	561.99	23.013	256.00	353.49	1348.77	811.49	24.961
177.00	245.34	938.00	565.11	23.042	257.00	354.86	1353.97	814.61	24.981
178.00	246.71	943.21	568.23	23.072	258.00	356.23	1359.16	817.73	25.002
179.00	248.08	948.41	571.35	23.101	259.00	357.60	1364.36	820.84	25.022
180.00	249.45	953.61	574.47	23.130	260.00	358.96	1369.56	823.96	25.042
181.00	250.82	958.81	577.59	23.159	261.00	360.33	1374.76	827.08	25.062
182.00	252.19	964.02	580.71	23.187	262.00	361.70	1379.95	830.20	25.082
183.00	253.56	969.22	583.83	23.216	263.00	363.07	1385.15	833.31	25.101
184.00	254.93	974.42	586.95	23.244	264.00	364.44	1390.35	836.43	25.121
185.00	256.30	979.62	590.07	23.272	265.00	365.81	1395.54	839.55	25.141
186.00	257.67	984.82	593.19	23.300	266.00	367.17	1400.74	842.67	25.160
187.00	259.04	990.03	596.31	23.328	267.00	368.54	1405.94	845.78	25.180
188.00	260.41	995.23	599.43	23.356	268.00	369.91	1411.13	848.90	25.199
189.00	261.78	1000.43	602.55	23.384	269.00	371.28	1416.33	852.02	25.219
190.00	263.15	1005.63	605.67	23.411	270.00	372.65	1421.53	855.14	25.238
191.00	264.51	1010.83	608.79	23.438	271.00	374.01	1426.73	858.25	25.257
192.00	265.88	1016.03	611.91	23.466	272.00	375.38	1431.92	861.37	25.276
193.00	267.25	1021.23	615.03	23.493	273.00	376.75	1437.12	864.49	25.295
194.00	268.62	1026.43	618.15	23.519	274.00	378.12	1442.32	867.61	25.314
195.00	269.99	1031.64	621.27	23.546	275.00	379.49	1447.51	870.72	25.333
196.00	271.36	1036.84	624.39	23.573	276.00	380.86	1452.71	873.84	25.352
197.00	272.73	1042.04	627.51	23.599	277.00	382.22	1457.91	876.96	25.371
198.00	274.10	1047.24	630.63	23.626	278.00	383.59	1463.10	880.08	25.390
199.00	275.47	1052.44	633.75	23.652	279.00	384.96	1468.30	883.19	25.408
200.00	276.84	1057.64	636.87	23.678	280.00	386.33	1473.50	886.31	25.427
201.00	278.21	1062.84	639.99	23.704	281.00	387.70	1478.69	889.43	25.445
202.00	279.58	1068.04	643.10	23.730	282.00	389.06	1483.89	892.54	25.464
203.00	280.95	1073.24	646.22	23.755	283.00	390.43	1489.09	895.66	25.482
204.00	282.32	1078.44	649.34	23.781	284.00	391.80	1494.28	898.78	25.501
205.00	283.69	1083.64	652.46	23.806	285.00	393.17	1499.48	901.90	25.519
206.00	285.06	1088.84	655.58	23.832	286.00	394.54	1504.67	905.01	25.537
207.00	286.42	1094.04	658.70	23.857	287.00	395.90	1509.87	908.13	25.555
208.00	287.79	1099.24	661.82	23.882	288.00	397.27	1515.07	911.25	25.573
209.00	289.16	1104.44	664.94	23.907	289.00	398.64	1520.26	914.36	25.591
210.00	290.53	1109.64	668.06	23.932	290.00	400.01	1525.46	917.48	25.609
211.00	291.90	1114.84	671.17	23.956	291.00	401.38	1530.66	920.60	25.627
212.00	293.27	1120.04	674.29	23.981	292.00	402.74	1535.85	923.72	25.645
213.00	294.64	1125.24	677.41	24.005	293.00	404.11	1541.05	926.83	25.663
214.00	296.01	1130.44	680.53	24.030	294.00	405.48	1546.25	929.95	25.680
215.00	297.38	1135.64	683.65	24.054	295.00	406.85	1551.44	933.07	25.698
216.00	298.75	1140.84	686.77	24.078	296.00	408.22	1556.64	936.18	25.716
217.00	300.12	1146.04	689.89	24.102	297.00	409.58	1561.83	939.30	25.733
218.00	301.48	1151.24	693.01	24.126	298.00	410.95	1567.03	942.42	25.751
219.00	302.85	1156.44	696.12	24.150	299.00	412.32	1572.23	945.53	25.768
220.00	304.22	1161.63	699.24	24.173	300.00	413.69	1577.42	948.65	25.785

16.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	6.03	14.36	4.58	1.941
4.00	6.22	16.50	6.41	2.578
5.00	6.50	19.31	8.78	3.223
6.00	6.88	22.86	11.70	3.866
7.00	7.43	27.07	15.02	4.517
8.00	8.20	32.31	19.01	5.215
9.00	9.24	38.66	23.68	5.963
10.00	10.54	45.68	28.60	6.701
11.00	12.00	52.87	33.42	7.387
12.00	13.53	59.95	38.01	8.003
13.00	15.09	66.81	42.35	8.552
14.00	16.63	73.46	46.49	9.045
15.00	18.16	79.92	50.47	9.491
16.00	19.68	86.22	54.32	9.897
17.00	21.17	92.39	58.07	10.271
18.00	22.64	98.44	61.74	10.618
19.00	24.10	104.41	65.34	10.940
20.00	25.55	110.30	68.88	11.242
21.00	26.98	116.13	72.39	11.527
22.00	28.40	121.89	75.85	11.795
23.00	29.81	127.61	79.28	12.049
24.00	31.21	133.29	82.68	12.291
25.00	32.61	138.93	86.06	12.521
26.00	34.00	144.54	89.42	12.741
27.00	35.38	150.11	92.76	12.951
28.00	36.75	155.67	96.08	13.153
29.00	38.12	161.19	99.39	13.347
30.00	39.49	166.70	102.68	13.534
31.00	40.85	172.19	105.97	13.714
32.00	42.20	177.66	109.24	13.888
33.00	43.55	183.11	112.50	14.055
34.00	44.90	188.55	115.76	14.218
35.00	46.25	193.98	119.00	14.375
36.00	47.59	199.40	122.24	14.528
37.00	48.93	204.80	125.47	14.676
38.00	50.27	210.19	128.70	14.820
39.00	51.60	215.58	131.92	14.959
40.00	52.93	220.95	135.14	15.096
41.00	54.26	226.32	138.35	15.228
42.00	55.59	231.68	141.55	15.357
43.00	56.92	237.03	144.76	15.483
44.00	58.24	242.38	147.95	15.606
45.00	59.56	247.71	151.15	15.726
46.00	60.88	253.05	154.34	15.843
47.00	62.20	258.37	157.53	15.958
48.00	63.52	263.70	160.71	16.070
49.00	64.84	269.01	163.90	16.179
50.00	66.15	274.33	167.08	16.287
51.00	67.47	279.64	170.25	16.392
52.00	68.78	284.94	173.43	16.495
53.00	70.09	290.24	176.60	16.596
54.00	71.41	295.54	179.77	16.695
55.00	72.72	300.83	182.94	16.792
56.00	74.02	306.12	186.11	16.887
57.00	75.33	311.41	189.27	16.981
58.00	76.64	316.69	192.44	17.073
59.00	77.95	321.97	195.60	17.163
60.00	79.25	327.25	198.76	17.252
61.00	80.56	332.52	201.92	17.339
62.00	81.86	337.80	205.07	17.425
63.00	83.17	343.07	208.23	17.509
64.00	84.47	348.34	211.39	17.592
65.00	85.77	353.60	214.54	17.674
66.00	87.08	358.87	217.69	17.754
67.00	88.38	364.13	220.84	17.833
68.00	89.68	369.39	223.99	17.911
69.00	90.98	374.65	227.14	17.988
70.00	92.28	379.90	230.29	18.063
71.00	93.58	385.16	233.44	18.138
72.00	94.88	390.41	236.59	18.211
73.00	96.18	395.66	239.73	18.284
74.00	97.48	400.91	242.88	18.355
75.00	98.77	406.16	246.02	18.426
76.00	100.07	411.41	249.17	18.495
77.00	101.37	416.65	252.31	18.564
78.00	102.67	421.90	255.45	18.632
79.00	103.96	427.14	258.59	18.698
80.00	105.26	432.38	261.74	18.764
81.00	106.55	437.63	264.88	18.829
82.00	107.85	442.87	268.02	18.894
83.00	109.14	448.10	271.16	18.957
84.00	110.44	453.34	274.29	19.020
85.00	111.73	458.58	277.43	19.082
86.00	113.03	463.82	280.57	19.143
87.00	114.32	469.05	283.71	19.204
88.00	115.62	474.28	286.84	19.263
89.00	116.91	479.52	289.98	19.323
90.00	118.20	484.75	293.12	19.381
91.00	119.50	489.98	296.25	19.439
92.00	120.79	495.21	299.39	19.496
93.00	122.08	500.44	302.52	19.553
94.00	123.37	505.67	305.65	19.609
95.00	124.66	510.90	308.79	19.664
96.00	125.96	516.13	311.92	19.719
97.00	127.25	521.35	315.05	19.773
98.00	128.54	526.58	318.19	19.826
99.00	129.83	531.81	321.32	19.879
100.00	131.12	537.03	324.45	19.932
101.00	132.41	542.26	327.58	19.984
102.00	133.70	547.48	330.71	20.035
103.00	134.99	552.70	333.84	20.086
104.00	136.28	557.93	336.98	20.137
105.00	137.57	563.15	340.11	20.187
106.00	138.87	568.37	343.24	20.236
107.00	140.15	573.59	346.37	20.285
108.00	141.44	578.81	349.50	20.334
109.00	142.73	584.03	352.62	20.382
110.00	144.02	589.25	355.75	20.430
111.00	145.31	594.47	358.88	20.477
112.00	146.60	599.69	362.01	20.524
113.00	147.89	604.91	365.14	20.570
114.00	149.18	610.13	368.27	20.616
115.00	150.47	615.34	371.40	20.662
116.00	151.76	620.56	374.52	20.707
117.00	153.05	625.78	377.65	20.752
118.00	154.34	630.99	380.78	20.796
119.00	155.62	636.21	383.91	20.840
120.00	156.91	641.42	387.03	20.884
121.00	158.20	646.64	390.16	20.927
122.00	159.49	651.85	393.29	20.970
123.00	160.78	657.07	396.41	21.012
124.00	162.06	662.28	399.54	21.055
125.00	163.35	667.50	402.66	21.096
126.00	164.64	672.71	405.79	21.138
127.00	165.93	677.92	408.92	21.179
128.00	167.21	683.14	412.04	21.220
129.00	168.50	688.35	415.17	21.261
130.00	169.79	693.56	418.29	21.301
131.00	171.08	698.77	421.42	21.341
132.00	172.36	703.99	424.54	21.381
133.00	173.65	709.20	427.67	21.420
134.00	174.94	714.41	430.79	21.459
135.00	176.22	719.62	433.92	21.498
136.00	177.51	724.83	437.04	21.536
137.00	178.80	730.04	440.16	21.574
138.00	180.08	735.25	443.29	21.612
139.00	181.37	740.46	446.41	21.650
140.00	182.66	745.67	449.54	21.687

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	183.94	750.88	452.66	21.724	221.00	286.71	1167.14	702.31	24.063
142.00	185.23	756.09	455.78	21.761	222.00	288.00	1172.34	705.43	24.086
143.00	186.52	761.30	458.91	21.798	223.00	289.28	1177.54	708.55	24.110
144.00	187.80	766.51	462.03	21.834	224.00	290.56	1182.74	711.67	24.133
145.00	189.09	771.71	465.15	21.870	225.00	291.85	1187.94	714.79	24.156
146.00	190.38	776.92	468.28	21.906	226.00	293.13	1193.14	717.90	24.179
147.00	191.66	782.13	471.40	21.941	227.00	294.41	1198.34	721.02	24.202
148.00	192.95	787.34	474.52	21.977	228.00	295.70	1203.54	724.14	24.225
149.00	194.23	792.55	477.65	22.012	229.00	296.98	1208.74	727.26	24.248
150.00	195.52	797.75	480.77	22.046	230.00	298.26	1213.94	730.38	24.270
151.00	196.80	802.96	483.89	22.081	231.00	299.55	1219.14	733.50	24.293
152.00	198.09	808.17	487.01	22.115	232.00	300.83	1224.34	736.62	24.315
153.00	199.38	813.37	490.14	22.150	233.00	302.11	1229.53	739.73	24.338
154.00	200.66	818.58	493.26	22.183	234.00	303.40	1234.73	742.85	24.360
155.00	201.95	823.79	496.38	22.217	235.00	304.68	1239.93	745.97	24.382
156.00	203.23	828.99	499.50	22.251	236.00	305.96	1245.13	749.09	24.404
157.00	204.52	834.20	502.63	22.284	237.00	307.25	1250.33	752.21	24.426
158.00	205.80	839.41	505.75	22.317	238.00	308.53	1255.53	755.33	24.448
159.00	207.09	844.61	508.87	22.350	239.00	309.81	1260.73	758.44	24.470
160.00	208.37	849.82	511.99	22.382	240.00	311.10	1265.92	761.56	24.492
161.00	209.66	855.02	515.11	22.415	241.00	312.38	1271.12	764.68	24.513
162.00	210.95	860.23	518.23	22.447	242.00	313.66	1276.32	767.80	24.535
163.00	212.23	865.43	521.36	22.479	243.00	314.95	1281.52	770.92	24.556
164.00	213.52	870.64	524.48	22.511	244.00	316.23	1286.72	774.03	24.577
165.00	214.80	875.84	527.60	22.543	245.00	317.51	1291.92	777.15	24.599
166.00	216.09	881.05	530.72	22.574	246.00	318.79	1297.11	780.27	24.620
167.00	217.37	886.25	533.84	22.605	247.00	320.08	1302.31	783.39	24.641
168.00	218.66	891.46	536.96	22.636	248.00	321.36	1307.51	786.51	24.662
169.00	219.94	896.66	540.08	22.667	249.00	322.64	1312.71	789.62	24.683
170.00	221.23	901.87	543.21	22.698	250.00	323.93	1317.91	792.74	24.704
171.00	222.51	907.07	546.33	22.729	251.00	325.21	1323.10	795.86	24.724
172.00	223.80	912.27	549.45	22.759	252.00	326.49	1328.30	798.98	24.745
173.00	225.08	917.48	552.57	22.789	253.00	327.78	1333.50	802.10	24.766
174.00	226.37	922.68	555.69	22.819	254.00	329.06	1338.70	805.21	24.786
175.00	227.65	927.89	558.81	22.849	255.00	330.34	1343.90	808.33	24.807
176.00	228.93	933.09	561.93	22.878	256.00	331.62	1349.09	811.45	24.827
177.00	230.22	938.29	565.05	22.908	257.00	332.91	1354.29	814.57	24.847
178.00	231.50	943.50	568.17	22.937	258.00	334.19	1359.49	817.68	24.867
179.00	232.79	948.70	571.29	22.966	259.00	335.47	1364.69	820.80	24.888
180.00	234.07	953.90	574.41	22.995	260.00	336.76	1369.88	823.92	24.908
181.00	235.36	959.10	577.53	23.024	261.00	338.04	1375.08	827.04	24.928
182.00	236.64	964.31	580.65	23.053	262.00	339.32	1380.28	830.16	24.947
183.00	237.93	969.51	583.77	23.081	263.00	340.60	1385.48	833.27	24.967
184.00	239.21	974.71	586.89	23.110	264.00	341.89	1390.67	836.39	24.987
185.00	240.49	979.92	590.01	23.138	265.00	343.17	1395.87	839.51	25.007
186.00	241.78	985.12	593.13	23.166	266.00	344.45	1401.07	842.63	25.026
187.00	243.06	990.32	596.26	23.194	267.00	345.74	1406.27	845.74	25.046
188.00	244.35	995.52	599.38	23.222	268.00	347.02	1411.46	848.86	25.065
189.00	245.63	1000.72	602.50	23.249	269.00	348.30	1416.66	851.98	25.084
190.00	246.92	1005.93	605.62	23.277	270.00	349.58	1421.86	855.10	25.104
191.00	248.20	1011.13	608.73	23.304	271.00	350.87	1427.05	858.21	25.123
192.00	249.48	1016.33	611.85	23.331	272.00	352.15	1432.25	861.33	25.142
193.00	250.77	1021.53	614.97	23.358	273.00	353.43	1437.45	864.45	25.161
194.00	252.05	1026.73	618.09	23.385	274.00	354.71	1442.65	867.57	25.180
195.00	253.34	1031.93	621.21	23.412	275.00	356.00	1447.84	870.68	25.199
196.00	254.62	1037.14	624.33	23.438	276.00	357.28	1453.04	873.80	25.218
197.00	255.90	1042.34	627.45	23.465	277.00	358.56	1458.24	876.92	25.237
198.00	257.19	1047.54	630.57	23.491	278.00	359.85	1463.43	880.04	25.255
199.00	258.47	1052.74	633.69	23.517	279.00	361.13	1468.63	883.15	25.274
200.00	259.76	1057.94	636.81	23.544	280.00	362.41	1473.83	886.27	25.293
201.00	261.04	1063.14	639.93	23.569	281.00	363.69	1479.02	889.39	25.311
202.00	262.32	1068.34	643.05	23.595	282.00	364.98	1484.22	892.51	25.330
203.00	263.61	1073.54	646.17	23.621	283.00	366.26	1489.42	895.62	25.348
204.00	264.89	1078.74	649.29	23.646	284.00	367.54	1494.61	898.74	25.366
205.00	266.18	1083.94	652.41	23.672	285.00	368.82	1499.81	901.86	25.385
206.00	267.46	1089.14	655.53	23.697	286.00	370.11	1505.01	904.97	25.403
207.00	268.74	1094.35	658.65	23.722	287.00	371.39	1510.20	908.09	25.421
208.00	270.03	1099.55	661.77	23.747	288.00	372.67	1515.40	911.21	25.439
209.00	271.31	1104.75	664.89	23.772	289.00	373.95	1520.60	914.33	25.457
210.00	272.59	1109.95	668.00	23.797	290.00	375.24	1525.79	917.44	25.475
211.00	273.88	1115.15	671.12	23.822	291.00	376.52	1530.99	920.56	25.493
212.00	275.16	1120.35	674.24	23.847	292.00	377.80	1536.19	923.68	25.511
213.00	276.45	1125.55	677.36	23.871	293.00	379.08	1541.38	926.80	25.529
214.00	277.73	1130.75	680.48	23.895	294.00	380.37	1546.58	929.91	25.546
215.00	279.01	1135.95	683.60	23.920	295.00	381.65	1551.78	933.03	25.564
216.00	280.30	1141.15	686.72	23.944	296.00	382.93	1556.97	936.15	25.582
217.00	281.58	1146.35	689.84	23.968	297.00	384.21	1562.17	939.26	25.599
218.00	282.86	1151.55	692.96	23.992	298.00	385.50	1567.37	942.38	25.616
219.00	284.15	1156.75	696.07	24.015	299.00	386.78	1572.56	945.50	25.634
220.00	285.43	1161.95	699.19	24.039	300.00	388.06	1577.76	948.62	25.651

17.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	6.00	14.92	4.59	1.926
4.00	6.18	17.04	6.39	2.555
5.00	6.44	19.81	8.72	3.192
6.00	6.80	23.28	11.56	3.821
7.00	7.31	27.38	14.78	4.455
8.00	8.01	32.43	18.64	5.128
9.00	8.94	38.57	23.17	5.850
10.00	10.10	45.38	27.99	6.567
11.00	11.42	52.45	32.77	7.240
12.00	12.84	59.47	37.36	7.852
13.00	14.28	66.32	41.73	8.400
14.00	15.72	72.99	45.90	8.894
15.00	17.16	79.47	49.91	9.341
16.00	18.58	85.79	53.79	9.750
17.00	19.98	91.99	57.57	10.125
18.00	21.37	98.08	61.26	10.473
19.00	22.75	104.07	64.88	10.797
20.00	24.11	109.99	68.45	11.101
21.00	25.46	115.83	71.97	11.386
22.00	26.80	121.62	75.45	11.656
23.00	28.14	127.36	78.90	11.911
24.00	29.46	133.06	82.32	12.153
25.00	30.77	138.72	85.71	12.384
26.00	32.08	144.34	89.08	12.605
27.00	33.39	149.94	92.43	12.816
28.00	34.68	155.50	95.76	13.018
29.00	35.97	161.05	99.08	13.213
30.00	37.26	166.57	102.38	13.400
31.00	38.54	172.07	105.67	13.580
32.00	39.82	177.55	108.95	13.754
33.00	41.10	183.02	112.22	13.923
34.00	42.37	188.47	115.49	14.085
35.00	43.64	193.91	118.74	14.243
36.00	44.90	199.33	121.98	14.396
37.00	46.16	204.74	125.22	14.544
38.00	47.43	210.15	128.45	14.688
39.00	48.68	215.54	131.68	14.828
40.00	49.94	220.92	134.90	14.965
41.00	51.19	226.30	138.12	15.097
42.00	52.44	231.67	141.33	15.227
43.00	53.69	237.03	144.54	15.353
44.00	54.94	242.38	147.74	15.476
45.00	56.19	247.72	150.94	15.596
46.00	57.43	253.06	154.13	15.713
47.00	58.68	258.40	157.32	15.828
48.00	59.92	263.73	160.51	15.940
49.00	61.16	269.05	163.70	16.050
50.00	62.40	274.37	166.88	16.157
51.00	63.64	279.68	170.06	16.263
52.00	64.88	284.99	173.24	16.366
53.00	66.11	290.30	176.42	16.467
54.00	67.35	295.60	179.59	16.566
55.00	68.58	300.90	182.76	16.663
56.00	69.82	306.19	185.93	16.759
57.00	71.05	311.49	189.10	16.852
58.00	72.28	316.77	192.27	16.944
59.00	73.51	322.06	195.43	17.035
60.00	74.74	327.34	198.59	17.123
61.00	75.97	332.62	201.76	17.211
62.00	77.20	337.90	204.92	17.296
63.00	78.43	343.17	208.07	17.381
64.00	79.66	348.45	211.23	17.464
65.00	80.88	353.71	214.39	17.546
66.00	82.11	358.98	217.54	17.626
67.00	83.34	364.25	220.70	17.705
68.00	84.56	369.51	223.85	17.783
69.00	85.79	374.77	227.00	17.860
70.00	87.01	380.03	230.15	17.936
71.00	88.24	385.29	233.30	18.010
72.00	89.46	390.55	236.45	18.084
73.00	90.68	395.80	239.60	18.156
74.00	91.90	401.06	242.74	18.228
75.00	93.13	406.31	245.89	18.298
76.00	94.35	411.56	249.03	18.368
77.00	95.57	416.81	252.18	18.436
78.00	96.79	422.05	255.32	18.504
79.00	98.01	427.30	258.47	18.571
80.00	99.23	432.55	261.61	18.637
81.00	100.45	437.79	264.75	18.702
82.00	101.67	443.03	267.89	18.766
83.00	102.89	448.27	271.03	18.830
84.00	104.11	453.51	274.17	18.893
85.00	105.33	458.75	277.31	18.955
86.00	106.55	463.99	280.45	19.016
87.00	107.77	469.23	283.59	19.076
88.00	108.99	474.47	286.73	19.136
89.00	110.21	479.70	289.86	19.195
90.00	111.42	484.94	293.00	19.254
91.00	112.64	490.17	296.14	19.312
92.00	113.86	495.40	299.27	19.369
93.00	115.07	500.63	302.41	19.426
94.00	116.29	505.87	305.54	19.481
95.00	117.51	511.10	308.68	19.537
96.00	118.72	516.33	311.81	19.592
97.00	119.94	521.55	314.95	19.646
98.00	121.16	526.78	318.08	19.699
99.00	122.37	532.01	321.21	19.752
100.00	123.59	537.24	324.35	19.805
101.00	124.80	542.46	327.48	19.857
102.00	126.02	547.69	330.61	19.909
103.00	127.23	552.91	333.74	19.959
104.00	128.45	558.14	336.88	20.010
105.00	129.66	563.36	340.01	20.060
106.00	130.88	568.59	343.14	20.109
107.00	132.09	573.81	346.27	20.159
108.00	133.31	579.03	349.40	20.207
109.00	134.52	584.25	352.53	20.255
110.00	135.74	589.47	355.66	20.303
111.00	136.95	594.69	358.79	20.350
112.00	138.16	599.91	361.92	20.397
113.00	139.38	605.13	365.05	20.443
114.00	140.59	610.35	368.18	20.489
115.00	141.80	615.57	371.31	20.535
116.00	143.02	620.79	374.43	20.580
117.00	144.23	626.01	377.56	20.625
118.00	145.44	631.23	380.69	20.669
119.00	146.66	636.44	383.82	20.713
120.00	147.87	641.66	386.95	20.757
121.00	149.08	646.88	390.07	20.800
122.00	150.29	652.09	393.20	20.843
123.00	151.51	657.31	396.33	20.886
124.00	152.72	662.52	399.45	20.928
125.00	153.93	667.74	402.58	20.970
126.00	155.14	672.95	405.71	21.011
127.00	156.36	678.17	408.83	21.053
128.00	157.57	683.38	411.96	21.094
129.00	158.78	688.60	415.09	21.134
130.00	159.99	693.81	418.21	21.174
131.00	161.20	699.02	421.34	21.214
132.00	162.42	704.24	424.46	21.254
133.00	163.63	709.45	427.59	21.293
134.00	164.84	714.66	430.71	21.332
135.00	166.05	719.87	433.84	21.371
136.00	167.26	725.08	436.96	21.410
137.00	168.47	730.30	440.09	21.448
138.00	169.68	735.51	443.21	21.486
139.00	170.90	740.72	446.34	21.523
140.00	172.11	745.93	449.46	21.561

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	173.32	751.14	452.59	21.598	221.00	270.06	1167.46	702.26	23.937
142.00	174.53	756.35	455.71	21.635	222.00	271.27	1172.66	705.38	23.960
143.00	175.74	761.56	458.83	21.671	223.00	272.47	1177.86	708.50	23.983
144.00	176.95	766.77	461.96	21.707	224.00	273.68	1183.06	711.62	24.007
145.00	178.16	771.98	465.08	21.743	225.00	274.89	1188.25	714.74	24.030
146.00	179.37	777.19	468.20	21.779	226.00	276.10	1193.45	717.86	24.053
147.00	180.58	782.40	471.33	21.815	227.00	277.31	1198.65	720.98	24.076
148.00	181.79	787.60	474.45	21.850	228.00	278.51	1203.85	724.09	24.099
149.00	183.00	792.81	477.57	21.885	229.00	279.72	1209.05	727.21	24.121
150.00	184.21	798.02	480.70	21.920	230.00	280.93	1214.25	730.33	24.144
151.00	185.43	803.23	483.82	21.955	231.00	282.14	1219.45	733.45	24.167
152.00	186.64	808.44	486.94	21.989	232.00	283.35	1224.65	736.57	24.189
153.00	187.85	813.64	490.07	22.023	233.00	284.55	1229.85	739.69	24.211
154.00	189.06	818.85	493.19	22.057	234.00	285.76	1235.05	742.81	24.234
155.00	190.27	824.06	496.31	22.091	235.00	286.97	1240.25	745.92	24.256
156.00	191.48	829.27	499.44	22.124	236.00	288.18	1245.45	749.04	24.278
157.00	192.69	834.47	502.56	22.158	237.00	289.38	1250.65	752.16	24.300
158.00	193.90	839.68	505.68	22.191	238.00	290.59	1255.85	755.28	24.322
159.00	195.11	844.89	508.80	22.223	239.00	291.80	1261.04	758.40	24.344
160.00	196.32	850.09	511.92	22.256	240.00	293.01	1266.24	761.52	24.365
161.00	197.53	855.30	515.05	22.289	241.00	294.22	1271.44	764.63	24.387
162.00	198.74	860.51	518.17	22.321	242.00	295.42	1276.64	767.75	24.409
163.00	199.95	865.71	521.29	22.353	243.00	296.63	1281.84	770.87	24.430
164.00	201.16	870.92	524.41	22.385	244.00	297.84	1287.04	773.99	24.451
165.00	202.37	876.12	527.53	22.416	245.00	299.05	1292.24	777.11	24.473
166.00	203.58	881.33	530.66	22.448	246.00	300.25	1297.43	780.23	24.494
167.00	204.79	886.53	533.78	22.479	247.00	301.46	1302.63	783.34	24.515
168.00	205.99	891.74	536.90	22.510	248.00	302.67	1307.83	786.46	24.536
169.00	207.20	896.95	540.02	22.541	249.00	303.88	1313.03	789.58	24.557
170.00	208.41	902.15	543.14	22.572	250.00	305.08	1318.23	792.70	24.578
171.00	209.62	907.35	546.26	22.602	251.00	306.29	1323.43	795.82	24.598
172.00	210.83	912.56	549.39	22.633	252.00	307.50	1328.62	798.93	24.619
173.00	212.04	917.76	552.51	22.663	253.00	308.71	1333.82	802.05	24.640
174.00	213.25	922.97	555.63	22.693	254.00	309.92	1339.02	805.17	24.660
175.00	214.46	928.17	558.75	22.723	255.00	311.12	1344.22	808.29	24.681
176.00	215.67	933.38	561.87	22.752	256.00	312.33	1349.42	811.41	24.701
177.00	216.88	938.58	564.99	22.782	257.00	313.54	1354.62	814.52	24.721
178.00	218.09	943.78	568.11	22.811	258.00	314.75	1359.81	817.64	24.741
179.00	219.30	948.99	571.23	22.840	259.00	315.95	1365.01	820.76	24.761
180.00	220.51	954.19	574.35	22.869	260.00	317.16	1370.21	823.88	24.781
181.00	221.72	959.40	577.47	22.898	261.00	318.37	1375.41	827.00	24.801
182.00	222.92	964.60	580.59	22.927	262.00	319.58	1380.60	830.11	24.821
183.00	224.13	969.80	583.72	22.955	263.00	320.78	1385.80	833.23	24.841
184.00	225.34	975.01	586.84	22.984	264.00	321.99	1391.00	836.35	24.861
185.00	226.55	980.21	589.96	23.012	265.00	323.20	1396.20	839.47	24.880
186.00	227.76	985.41	593.08	23.040	266.00	324.40	1401.40	842.59	24.900
187.00	228.97	990.61	596.20	23.068	267.00	325.61	1406.59	845.70	24.920
188.00	230.18	995.82	599.32	23.095	268.00	326.82	1411.79	848.82	24.939
189.00	231.39	1001.02	602.44	23.123	269.00	328.03	1416.99	851.94	24.958
190.00	232.60	1006.22	605.56	23.150	270.00	329.23	1422.19	855.06	24.978
191.00	233.81	1011.42	608.68	23.178	271.00	330.44	1427.38	858.17	24.997
192.00	235.01	1016.63	611.80	23.205	272.00	331.65	1432.58	861.29	25.016
193.00	236.22	1021.83	614.92	23.232	273.00	332.86	1437.78	864.41	25.035
194.00	237.43	1027.03	618.04	23.259	274.00	334.06	1442.98	867.53	25.054
195.00	238.64	1032.23	621.16	23.286	275.00	335.27	1448.17	870.64	25.073
196.00	239.85	1037.44	624.28	23.312	276.00	336.48	1453.37	873.76	25.092
197.00	241.06	1042.64	627.40	23.339	277.00	337.69	1458.57	876.88	25.111
198.00	242.27	1047.84	630.52	23.365	278.00	338.89	1463.76	880.00	25.129
199.00	243.47	1053.04	633.64	23.391	279.00	340.10	1468.96	883.11	25.148
200.00	244.68	1058.24	636.76	23.417	280.00	341.31	1474.16	886.23	25.167
201.00	245.89	1063.44	639.88	23.443	281.00	342.52	1479.36	889.35	25.185
202.00	247.10	1068.64	643.00	23.469	282.00	343.72	1484.55	892.47	25.204
203.00	248.31	1073.85	646.12	23.495	283.00	344.93	1489.75	895.58	25.222
204.00	249.52	1079.05	649.24	23.520	284.00	346.14	1494.95	898.70	25.240
205.00	250.73	1084.25	652.36	23.546	285.00	347.34	1500.14	901.82	25.259
206.00	251.93	1089.45	655.48	23.571	286.00	348.55	1505.34	904.94	25.277
207.00	253.14	1094.65	658.59	23.596	287.00	349.76	1510.54	908.05	25.295
208.00	254.35	1099.85	661.71	23.621	288.00	350.97	1515.73	911.17	25.313
209.00	255.56	1105.05	664.83	23.646	289.00	352.17	1520.93	914.29	25.331
210.00	256.77	1110.25	667.95	23.671	290.00	353.38	1526.13	917.41	25.349
211.00	257.98	1115.45	671.07	23.696	291.00	354.59	1531.32	920.52	25.367
212.00	259.18	1120.65	674.19	23.720	292.00	355.79	1536.52	923.64	25.385
213.00	260.39	1125.85	677.31	23.745	293.00	357.00	1541.72	926.76	25.403
214.00	261.60	1131.05	680.43	23.769	294.00	358.21	1546.92	929.88	25.420
215.00	262.81	1136.26	683.55	23.793	295.00	359.42	1552.11	932.99	25.438
216.00	264.02	1141.46	686.67	23.818	296.00	360.62	1557.31	936.11	25.455
217.00	265.22	1146.66	689.79	23.842	297.00	361.83	1562.51	939.23	25.473
218.00	266.43	1151.86	692.91	23.865	298.00	363.04	1567.70	942.34	25.490
219.00	267.64	1157.06	696.02	23.889	299.00	364.24	1572.90	945.46	25.508
220.00	268.85	1162.26	699.14	23.913	300.00	365.45	1578.09	948.58	25.525

18.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.96	15.48	4.61	1.911
4.00	6.14	17.58	6.38	2.534
5.00	6.38	20.30	8.66	3.161
6.00	6.73	23.71	11.45	3.779
7.00	7.20	27.70	14.57	4.397
8.00	7.84	32.61	18.31	5.050
9.00	8.68	38.55	22.72	5.749
10.00	9.73	45.17	27.43	6.446
11.00	10.93	52.11	32.16	7.107
12.00	12.23	59.06	36.75	7.712
13.00	13.58	65.89	41.13	8.259
14.00	14.93	72.56	45.33	8.753
15.00	16.28	79.05	49.37	9.201
16.00	17.62	85.40	53.27	9.611
17.00	18.94	91.62	57.08	9.988
18.00	20.25	97.73	60.79	10.337
19.00	21.55	103.75	64.44	10.663
20.00	22.84	109.69	68.03	10.967
21.00	24.12	115.56	71.56	11.254
22.00	25.39	121.37	75.06	11.524
23.00	26.65	127.13	78.52	11.780
24.00	27.90	132.84	81.95	12.023
25.00	29.15	138.52	85.36	12.255
26.00	30.39	144.16	88.74	12.476
27.00	31.62	149.77	92.10	12.688
28.00	32.85	155.35	95.44	12.891
29.00	34.07	160.91	98.77	13.086
30.00	35.29	166.44	102.08	13.273
31.00	36.50	171.95	105.38	13.454
32.00	37.71	177.45	108.67	13.629
33.00	38.92	182.93	111.95	13.797
34.00	40.12	188.39	115.22	13.960
35.00	41.32	193.84	118.48	14.118
36.00	42.52	199.27	121.73	14.271
37.00	43.71	204.70	124.97	14.420
38.00	44.90	210.11	128.21	14.564
39.00	46.09	215.51	131.44	14.704
40.00	47.28	220.90	134.67	14.841
41.00	48.47	226.29	137.89	14.974
42.00	49.65	231.66	141.11	15.103
43.00	50.83	237.03	144.32	15.230
44.00	52.01	242.39	147.52	15.353
45.00	53.19	247.74	150.73	15.473
46.00	54.37	253.09	153.93	15.591
47.00	55.54	258.43	157.12	15.706
48.00	56.72	263.76	160.32	15.818
49.00	57.89	269.09	163.50	15.928
50.00	59.06	274.42	166.69	16.035
51.00	60.23	279.74	169.88	16.141
52.00	61.40	285.05	173.06	16.244
53.00	62.57	290.36	176.24	16.345
54.00	63.74	295.67	179.41	16.444
55.00	64.91	300.97	182.59	16.542
56.00	66.07	306.27	185.76	16.637
57.00	67.24	311.57	188.93	16.731
58.00	68.40	316.86	192.10	16.823
59.00	69.57	322.15	195.27	16.913
60.00	70.73	327.44	198.43	17.002
61.00	71.89	332.72	201.60	17.090
62.00	73.06	338.00	204.76	17.175
63.00	74.22	343.28	207.92	17.260
64.00	75.38	348.56	211.08	17.343
65.00	76.54	353.83	214.24	17.425
66.00	77.70	359.10	217.39	17.505
67.00	78.86	364.37	220.55	17.584
68.00	80.01	369.64	223.70	17.662
69.00	81.17	374.90	226.86	17.739
70.00	82.33	380.17	230.01	17.815
71.00	83.49	385.43	233.16	17.890
72.00	84.64	390.69	236.31	17.963
73.00	85.80	395.95	239.46	18.036
74.00	86.95	401.20	242.61	18.107
75.00	88.11	406.46	245.76	18.178
76.00	89.26	411.71	248.90	18.247
77.00	90.42	416.96	252.05	18.316
78.00	91.57	422.21	255.19	18.384
79.00	92.73	427.46	258.34	18.451
80.00	93.88	432.71	261.48	18.517
81.00	95.03	437.96	264.63	18.582
82.00	96.18	443.20	267.77	18.646
83.00	97.34	448.44	270.91	18.710
84.00	98.49	453.69	274.05	18.773
85.00	99.64	458.93	277.19	18.835
86.00	100.79	464.17	280.33	18.896
87.00	101.94	469.41	283.47	18.956
88.00	103.10	474.65	286.61	19.016
89.00	104.25	479.89	289.75	19.076
90.00	105.40	485.12	292.89	19.134
91.00	106.55	490.36	296.03	19.192
92.00	107.70	495.59	299.16	19.249
93.00	108.85	500.83	302.30	19.306
94.00	110.00	506.06	305.44	19.362
95.00	111.15	511.29	308.57	19.417
96.00	112.30	516.52	311.71	19.472
97.00	113.45	521.76	314.84	19.526
98.00	114.59	526.99	317.98	19.580
99.00	115.74	532.21	321.11	19.633
100.00	116.89	537.44	324.24	19.685
101.00	118.04	542.67	327.38	19.737
102.00	119.19	547.90	330.51	19.789
103.00	120.34	553.13	333.64	19.840
104.00	121.48	558.35	336.78	19.890
105.00	122.63	563.58	339.91	19.940
106.00	123.78	568.80	343.04	19.990
107.00	124.93	574.03	346.17	20.039
108.00	126.07	579.25	349.30	20.088
109.00	127.22	584.47	352.43	20.136
110.00	128.37	589.70	355.57	20.183
111.00	129.52	594.92	358.70	20.231
112.00	130.66	600.14	361.83	20.277
113.00	131.81	605.36	364.96	20.324
114.00	132.96	610.58	368.09	20.370
115.00	134.10	615.80	371.21	20.415
116.00	135.25	621.02	374.34	20.461
117.00	136.39	626.24	377.47	20.505
118.00	137.54	631.46	380.60	20.550
119.00	138.69	636.68	383.73	20.594
120.00	139.83	641.90	386.86	20.638
121.00	140.98	647.12	389.99	20.681
122.00	142.12	652.33	393.11	20.724
123.00	143.27	657.55	396.24	20.766
124.00	144.41	662.77	399.37	20.809
125.00	145.56	667.98	402.50	20.851
126.00	146.70	673.20	405.62	20.892
127.00	147.85	678.41	408.75	20.933
128.00	148.99	683.63	411.88	20.974
129.00	150.14	688.84	415.00	21.015
130.00	151.28	694.06	418.13	21.055
131.00	152.43	699.27	421.26	21.095
132.00	153.57	704.49	424.38	21.135
133.00	154.72	709.70	427.51	21.174
134.00	155.86	714.91	430.63	21.213
135.00	157.01	720.13	433.76	21.252
136.00	158.15	725.34	436.89	21.290
137.00	159.30	730.55	440.01	21.328
138.00	160.44	735.76	443.14	21.366
139.00	161.59	740.98	446.26	21.404
140.00	162.73	746.19	449.39	21.441

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	163.87	751.40	452.51	21.478	221.00	255.25	1167.77	702.21	23.818
142.00	165.02	756.61	455.63	21.515	222.00	256.39	1172.97	705.33	23.841
143.00	166.16	761.82	458.76	21.552	223.00	257.53	1178.17	708.45	23.864
144.00	167.30	767.03	461.88	21.588	224.00	258.67	1183.37	711.57	23.888
145.00	168.45	772.24	465.01	21.624	225.00	259.82	1188.57	714.69	23.911
146.00	169.59	777.45	468.13	21.660	226.00	260.96	1193.77	717.81	23.934
147.00	170.74	782.66	471.26	21.696	227.00	262.10	1198.97	720.93	23.957
148.00	171.88	787.87	474.38	21.731	228.00	263.24	1204.17	724.05	23.980
149.00	173.02	793.08	477.50	21.766	229.00	264.38	1209.37	727.17	24.003
150.00	174.17	798.29	480.63	21.801	230.00	265.52	1214.57	730.28	24.025
151.00	175.31	803.50	483.75	21.835	231.00	266.66	1219.77	733.40	24.048
152.00	176.45	808.71	486.87	21.870	232.00	267.80	1224.97	736.52	24.070
153.00	177.60	813.92	490.00	21.904	233.00	268.94	1230.17	739.64	24.093
154.00	178.74	819.12	493.12	21.938	234.00	270.08	1235.37	742.76	24.115
155.00	179.88	824.33	496.24	21.972	235.00	271.23	1240.57	745.88	24.137
156.00	181.03	829.54	499.37	22.005	236.00	272.37	1245.76	749.00	24.159
157.00	182.17	834.75	502.49	22.038	237.00	273.51	1250.96	752.12	24.181
158.00	183.31	839.96	505.61	22.071	238.00	274.65	1256.16	755.23	24.203
159.00	184.46	845.16	508.74	22.104	239.00	275.79	1261.36	758.35	24.225
160.00	185.60	850.37	511.86	22.137	240.00	276.93	1266.56	761.47	24.246
161.00	186.74	855.58	514.98	22.169	241.00	278.07	1271.76	764.59	24.268
162.00	187.88	860.78	518.10	22.202	242.00	279.21	1276.96	767.71	24.290
163.00	189.03	865.99	521.23	22.234	243.00	280.35	1282.16	770.83	24.311
164.00	190.17	871.20	524.35	22.266	244.00	281.49	1287.36	773.94	24.332
165.00	191.31	876.40	527.47	22.297	245.00	282.63	1292.56	777.06	24.354
166.00	192.45	881.61	530.59	22.329	246.00	283.77	1297.76	780.18	24.375
167.00	193.60	886.82	533.71	22.360	247.00	284.91	1302.95	783.30	24.396
168.00	194.74	892.02	536.84	22.391	248.00	286.05	1308.15	786.42	24.417
169.00	195.88	897.23	539.96	22.422	249.00	287.20	1313.35	789.54	24.438
170.00	197.03	902.43	543.08	22.453	250.00	288.34	1318.55	792.65	24.459
171.00	198.17	907.64	546.20	22.483	251.00	289.48	1323.75	795.77	24.479
172.00	199.31	912.84	549.32	22.513	252.00	290.62	1328.95	798.89	24.500
173.00	200.45	918.05	552.44	22.544	253.00	291.76	1334.15	802.01	24.521
174.00	201.59	923.25	555.57	22.574	254.00	292.90	1339.34	805.13	24.541
175.00	202.74	928.46	558.69	22.603	255.00	294.04	1344.54	808.25	24.562
176.00	203.88	933.66	561.81	22.633	256.00	295.18	1349.74	811.36	24.582
177.00	205.02	938.87	564.93	22.663	257.00	296.32	1354.94	814.48	24.602
178.00	206.16	944.07	568.05	22.692	258.00	297.46	1360.14	817.60	24.622
179.00	207.31	949.28	571.17	22.721	259.00	298.60	1365.34	820.72	24.643
180.00	208.45	954.48	574.29	22.750	260.00	299.74	1370.53	823.84	24.663
181.00	209.59	959.69	577.42	22.779	261.00	300.88	1375.73	826.95	24.683
182.00	210.73	964.89	580.54	22.808	262.00	302.02	1380.93	830.07	24.702
183.00	211.87	970.09	583.66	22.836	263.00	303.16	1386.13	833.19	24.722
184.00	213.02	975.30	586.78	22.864	264.00	304.30	1391.33	836.31	24.742
185.00	214.16	980.50	589.90	22.893	265.00	305.44	1396.52	839.43	24.762
186.00	215.30	985.71	593.02	22.921	266.00	306.58	1401.72	842.54	24.781
187.00	216.44	990.91	596.14	22.949	267.00	307.72	1406.92	845.66	24.801
188.00	217.58	996.11	599.26	22.976	268.00	308.87	1412.12	848.78	24.820
189.00	218.73	1001.32	602.38	23.004	269.00	310.01	1417.32	851.90	24.839
190.00	219.87	1006.52	605.50	23.031	270.00	311.15	1422.51	855.02	24.859
191.00	221.01	1011.72	608.62	23.059	271.00	312.29	1427.71	858.13	24.878
192.00	222.15	1016.92	611.74	23.086	272.00	313.43	1432.91	861.25	24.897
193.00	223.29	1022.13	614.86	23.113	273.00	314.57	1438.11	864.37	24.916
194.00	224.43	1027.33	617.98	23.140	274.00	315.71	1443.30	867.49	24.935
195.00	225.58	1032.53	621.10	23.167	275.00	316.85	1448.50	870.60	24.954
196.00	226.72	1037.73	624.22	23.193	276.00	317.99	1453.70	873.72	24.973
197.00	227.86	1042.94	627.34	23.220	277.00	319.13	1458.90	876.84	24.992
198.00	229.00	1048.14	630.46	23.246	278.00	320.27	1464.10	879.96	25.011
199.00	230.14	1053.34	633.58	23.272	279.00	321.41	1469.29	883.07	25.029
200.00	231.28	1058.54	636.70	23.298	280.00	322.55	1474.49	886.19	25.048
201.00	232.43	1063.75	639.82	23.324	281.00	323.69	1479.69	889.31	25.066
202.00	233.57	1068.95	642.94	23.350	282.00	324.83	1484.88	892.43	25.085
203.00	234.71	1074.15	646.06	23.376	283.00	325.97	1490.08	895.55	25.103
204.00	235.85	1079.35	649.18	23.401	284.00	327.11	1495.28	898.66	25.122
205.00	236.99	1084.55	652.30	23.427	285.00	328.25	1500.48	901.78	25.140
206.00	238.13	1089.75	655.42	23.452	286.00	329.39	1505.67	904.90	25.158
207.00	239.27	1094.96	658.54	23.477	287.00	330.53	1510.87	908.02	25.176
208.00	240.42	1100.16	661.66	23.502	288.00	331.67	1516.07	911.13	25.194
209.00	241.56	1105.36	664.78	23.527	289.00	332.81	1521.27	914.25	25.212
210.00	242.70	1110.56	667.90	23.552	290.00	333.95	1526.46	917.37	25.230
211.00	243.84	1115.76	671.02	23.577	291.00	335.09	1531.66	920.49	25.248
212.00	244.98	1120.96	674.14	23.601	292.00	336.23	1536.86	923.60	25.266
213.00	246.12	1126.16	677.26	23.626	293.00	337.37	1542.05	926.72	25.284
214.00	247.26	1131.36	680.38	23.650	294.00	338.51	1547.25	929.84	25.301
215.00	248.40	1136.56	683.50	23.674	295.00	339.65	1552.45	932.96	25.319
216.00	249.55	1141.76	686.62	23.699	296.00	340.79	1557.64	936.07	25.337
217.00	250.69	1146.97	689.74	23.723	297.00	341.93	1562.84	939.19	25.354
218.00	251.83	1152.17	692.86	23.747	298.00	343.07	1568.04	942.31	25.372
219.00	252.97	1157.37	695.98	23.770	299.00	344.21	1573.23	945.42	25.389
220.00	254.11	1162.57	699.09	23.794	300.00	345.35	1578.43	948.54	25.406

19.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.93	16.04	4.63	1.896
4.00	6.10	18.11	6.38	2.513
5.00	6.33	20.80	8.61	3.133
6.00	6.66	24.16	11.34	3.739
7.00	7.10	28.05	14.39	4.343
8.00	7.69	32.83	18.02	4.979
9.00	8.46	38.60	22.32	5.657
10.00	9.41	45.05	26.93	6.336
11.00	10.51	51.84	31.61	6.984
12.00	11.71	58.72	36.17	7.582
13.00	12.96	65.52	40.57	8.126
14.00	14.23	72.17	44.78	8.620
15.00	15.50	78.68	48.84	9.069
16.00	16.76	85.04	52.78	9.480
17.00	18.01	91.28	56.60	9.858
18.00	19.26	97.42	60.34	10.208
19.00	20.49	103.45	64.00	10.535
20.00	21.71	109.41	67.61	10.840
21.00	22.93	115.30	71.17	11.128
22.00	24.13	121.13	74.68	11.399
23.00	25.33	126.91	78.15	11.656
24.00	26.51	132.64	81.60	11.900
25.00	27.70	138.33	85.01	12.132
26.00	28.87	143.99	88.41	12.354
27.00	30.04	149.61	91.78	12.566
28.00	31.21	155.21	95.13	12.770
29.00	32.37	160.78	98.47	12.965
30.00	33.52	166.33	101.79	13.153
31.00	34.67	171.85	105.10	13.335
32.00	35.82	177.36	108.39	13.509
33.00	36.97	182.85	111.68	13.678
34.00	38.11	188.32	114.95	13.842
35.00	39.25	193.78	118.22	14.000
36.00	40.38	199.22	121.48	14.153
37.00	41.52	204.66	124.73	14.302
38.00	42.65	210.08	127.97	14.447
39.00	43.78	215.49	131.21	14.587
40.00	44.90	220.89	134.44	14.724
41.00	46.03	226.28	137.67	14.857
42.00	47.15	231.66	140.89	14.987
43.00	48.27	237.03	144.10	15.113
44.00	49.39	242.40	147.31	15.237
45.00	50.51	247.76	150.52	15.357
46.00	51.63	253.11	153.72	15.475
47.00	52.74	258.46	156.92	15.590
48.00	53.85	263.80	160.12	15.702
49.00	54.97	269.14	163.31	15.812
50.00	56.08	274.47	166.50	15.920
51.00	57.19	279.79	169.69	16.025
52.00	58.30	285.11	172.87	16.129
53.00	59.41	290.43	176.06	16.230
54.00	60.52	295.74	179.24	16.329
55.00	61.62	301.05	182.41	16.427
56.00	62.73	306.35	185.59	16.522
57.00	63.83	311.66	188.76	16.616
58.00	64.94	316.95	191.93	16.708
59.00	66.04	322.25	195.10	16.799
60.00	67.14	327.54	198.27	16.887
61.00	68.25	332.83	201.44	16.975
62.00	69.35	338.11	204.60	17.061
63.00	70.45	343.39	207.76	17.145
64.00	71.55	348.67	210.93	17.229
65.00	72.65	353.95	214.09	17.310
66.00	73.75	359.23	217.24	17.391
67.00	74.85	364.50	220.40	17.470
68.00	75.94	369.77	223.56	17.548
69.00	77.04	375.04	226.71	17.625
70.00	78.14	380.30	229.87	17.701
71.00	79.24	385.57	233.02	17.776
72.00	80.33	390.83	236.17	17.849
73.00	81.43	396.09	239.32	17.922
74.00	82.52	401.35	242.47	17.993
75.00	83.62	406.61	245.62	18.064
76.00	84.71	411.86	248.77	18.134
77.00	85.81	417.12	251.92	18.202
78.00	86.90	422.37	255.07	18.270
79.00	88.00	427.62	258.21	18.337
80.00	89.09	432.87	261.36	18.403
81.00	90.18	438.12	264.50	18.468
82.00	91.27	443.37	267.65	18.533
83.00	92.37	448.62	270.79	18.596
84.00	93.46	453.86	273.93	18.659
85.00	94.55	459.11	277.07	18.721
86.00	95.64	464.35	280.22	18.782
87.00	96.73	469.59	283.36	18.843
88.00	97.82	474.83	286.50	18.903
89.00	98.92	480.07	289.64	18.962
90.00	100.01	485.31	292.78	19.021
91.00	101.10	490.55	295.91	19.078
92.00	102.19	495.79	299.05	19.136
93.00	103.28	501.02	302.19	19.192
94.00	104.37	506.26	305.33	19.248
95.00	105.46	511.49	308.46	19.304
96.00	106.54	516.72	311.60	19.358
97.00	107.63	521.96	314.74	19.413
98.00	108.72	527.19	317.87	19.466
99.00	109.81	532.42	321.01	19.519
100.00	110.90	537.65	324.14	19.572
101.00	111.99	542.88	327.28	19.624
102.00	113.08	548.11	330.41	19.676
103.00	114.16	553.34	333.54	19.727
104.00	115.25	558.57	336.68	19.777
105.00	116.34	563.79	339.81	19.827
106.00	117.43	569.02	342.94	19.877
107.00	118.52	574.25	346.08	19.926
108.00	119.60	579.47	349.21	19.974
109.00	120.69	584.70	352.34	20.023
110.00	121.78	589.92	355.47	20.070
111.00	122.86	595.14	358.60	20.117
112.00	123.95	600.37	361.73	20.164
113.00	125.04	605.59	364.86	20.211
114.00	126.12	610.81	367.99	20.257
115.00	127.21	616.03	371.12	20.302
116.00	128.30	621.25	374.25	20.348
117.00	129.38	626.48	377.38	20.392
118.00	130.47	631.70	380.51	20.437
119.00	131.55	636.92	383.64	20.481
120.00	132.64	642.14	386.77	20.525
121.00	133.73	647.35	389.90	20.568
122.00	134.81	652.57	393.03	20.611
123.00	135.90	657.79	396.16	20.653
124.00	136.98	663.01	399.29	20.696
125.00	138.07	668.23	402.41	20.738
126.00	139.15	673.44	405.54	20.779
127.00	140.24	678.66	408.67	20.820
128.00	141.32	683.88	411.80	20.861
129.00	142.41	689.09	414.92	20.902
130.00	143.49	694.31	418.05	20.942
131.00	144.58	699.52	421.18	20.982
132.00	145.66	704.74	424.30	21.022
133.00	146.75	709.95	427.43	21.061
134.00	147.83	715.17	430.56	21.100
135.00	148.92	720.38	433.68	21.139
136.00	150.00	725.59	436.81	21.177
137.00	151.09	730.81	439.93	21.216
138.00	152.17	736.02	443.06	21.254
139.00	153.25	741.23	446.19	21.291
140.00	154.34	746.45	449.31	21.329

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	155.42	751.66	452.44	21.366	221.00	242.00	1168.08	702.16	23.705
142.00	156.51	756.87	455.56	21.402	222.00	243.09	1173.28	705.28	23.729
143.00	157.59	762.08	458.69	21.439	223.00	244.17	1178.48	708.40	23.752
144.00	158.67	767.29	461.81	21.475	224.00	245.25	1183.68	711.52	23.775
145.00	159.76	772.51	464.94	21.511	225.00	246.33	1188.88	714.64	23.798
146.00	160.84	777.72	468.06	21.547	226.00	247.41	1194.08	717.76	23.821
147.00	161.93	782.93	471.18	21.583	227.00	248.49	1199.28	720.88	23.844
148.00	163.01	788.14	474.31	21.618	228.00	249.57	1204.48	724.00	23.867
149.00	164.09	793.35	477.43	21.653	229.00	250.65	1209.68	727.12	23.890
150.00	165.18	798.56	480.56	21.688	230.00	251.73	1214.88	730.24	23.913
151.00	166.26	803.77	483.68	21.723	231.00	252.82	1220.08	733.36	23.935
152.00	167.34	808.98	486.80	21.757	232.00	253.90	1225.28	736.48	23.958
153.00	168.43	814.19	489.93	21.791	233.00	254.98	1230.48	739.59	23.980
154.00	169.51	819.40	493.05	21.825	234.00	256.06	1235.68	742.71	24.002
155.00	170.59	824.61	496.18	21.859	235.00	257.14	1240.88	745.83	24.025
156.00	171.68	829.81	499.30	21.892	236.00	258.22	1246.08	748.95	24.047
157.00	172.76	835.02	502.42	21.926	237.00	259.30	1251.28	752.07	24.069
158.00	173.84	840.23	505.55	21.959	238.00	260.38	1256.48	755.19	24.090
159.00	174.93	845.44	508.67	21.992	239.00	261.46	1261.68	758.31	24.112
160.00	176.01	850.65	511.79	22.024	240.00	262.54	1266.88	761.43	24.134
161.00	177.09	855.86	514.91	22.057	241.00	263.62	1272.08	764.54	24.156
162.00	178.17	861.06	518.04	22.089	242.00	264.70	1277.28	767.66	24.177
163.00	179.26	866.27	521.16	22.121	243.00	265.79	1282.48	770.78	24.199
164.00	180.34	871.48	524.28	22.153	244.00	266.87	1287.68	773.90	24.220
165.00	181.42	876.68	527.41	22.185	245.00	267.95	1292.88	777.02	24.241
166.00	182.51	881.89	530.53	22.216	246.00	269.03	1298.08	780.14	24.262
167.00	183.59	887.10	533.65	22.247	247.00	270.11	1303.28	783.26	24.283
168.00	184.67	892.31	536.77	22.278	248.00	271.19	1308.47	786.37	24.304
169.00	185.75	897.51	539.90	22.309	249.00	272.27	1313.67	789.49	24.325
170.00	186.84	902.72	543.02	22.340	250.00	273.35	1318.87	792.61	24.346
171.00	187.92	907.92	546.14	22.370	251.00	274.43	1324.07	795.73	24.367
172.00	189.00	913.13	549.26	22.401	252.00	275.51	1329.27	798.85	24.388
173.00	190.08	918.34	552.38	22.431	253.00	276.59	1334.47	801.97	24.408
174.00	191.17	923.54	555.51	22.461	254.00	277.67	1339.67	805.08	24.429
175.00	192.25	928.75	558.63	22.491	255.00	278.75	1344.87	808.20	24.449
176.00	193.33	933.95	561.75	22.521	256.00	279.83	1350.07	811.32	24.470
177.00	194.41	939.16	564.87	22.550	257.00	280.91	1355.26	814.44	24.490
178.00	195.49	944.36	567.99	22.579	258.00	282.00	1360.46	817.56	24.510
179.00	196.58	949.57	571.11	22.608	259.00	283.08	1365.66	820.68	24.530
180.00	197.66	954.77	574.23	22.637	260.00	284.16	1370.86	823.79	24.550
181.00	198.74	959.98	577.36	22.666	261.00	285.24	1376.06	826.91	24.570
182.00	199.82	965.18	580.48	22.695	262.00	286.32	1381.26	830.03	24.590
183.00	200.91	970.39	583.60	22.724	263.00	287.40	1386.46	833.15	24.610
184.00	201.99	975.59	586.72	22.752	264.00	288.48	1391.65	836.27	24.629
185.00	203.07	980.80	589.84	22.780	265.00	289.56	1396.85	839.38	24.649
186.00	204.15	986.00	592.96	22.808	266.00	290.64	1402.05	842.50	24.669
187.00	205.23	991.20	596.08	22.836	267.00	291.72	1407.25	845.62	24.688
188.00	206.32	996.41	599.20	22.864	268.00	292.80	1412.45	848.74	24.708
189.00	207.40	1001.61	602.32	22.891	269.00	293.88	1417.64	851.86	24.727
190.00	208.48	1006.81	605.45	22.919	270.00	294.96	1422.84	854.97	24.746
191.00	209.56	1012.02	608.57	22.946	271.00	296.04	1428.04	858.09	24.766
192.00	210.64	1017.22	611.69	22.973	272.00	297.12	1433.24	861.21	24.785
193.00	211.72	1022.42	614.81	23.000	273.00	298.20	1438.44	864.33	24.804
194.00	212.81	1027.63	617.93	23.027	274.00	299.28	1443.63	867.45	24.823
195.00	213.89	1032.83	621.05	23.054	275.00	300.36	1448.83	870.56	24.842
196.00	214.97	1038.03	624.17	23.081	276.00	301.44	1454.03	873.68	24.861
197.00	216.05	1043.24	627.29	23.107	277.00	302.52	1459.23	876.80	24.879
198.00	217.13	1048.44	630.41	23.133	278.00	303.60	1464.43	879.92	24.898
199.00	218.21	1053.64	633.53	23.160	279.00	304.69	1469.62	883.04	24.917
200.00	219.30	1058.85	636.65	23.186	280.00	305.77	1474.82	886.15	24.935
201.00	220.38	1064.05	639.77	23.212	281.00	306.85	1480.02	889.27	24.954
202.00	221.46	1069.25	642.89	23.237	282.00	307.93	1485.22	892.39	24.972
203.00	222.54	1074.45	646.01	23.263	283.00	309.01	1490.41	895.51	24.991
204.00	223.62	1079.65	649.13	23.289	284.00	310.09	1495.61	898.62	25.009
205.00	224.70	1084.86	652.25	23.314	285.00	311.17	1500.81	901.74	25.027
206.00	225.79	1090.06	655.37	23.340	286.00	312.25	1506.01	904.86	25.046
207.00	226.87	1095.26	658.49	23.365	287.00	313.33	1511.20	907.98	25.064
208.00	227.95	1100.46	661.61	23.390	288.00	314.41	1516.40	911.10	25.082
209.00	229.03	1105.66	664.73	23.415	289.00	315.49	1521.60	914.21	25.100
210.00	230.11	1110.87	667.85	23.440	290.00	316.57	1526.80	917.33	25.118
211.00	231.19	1116.07	670.97	23.464	291.00	317.65	1531.99	920.45	25.136
212.00	232.27	1121.27	674.09	23.489	292.00	318.73	1537.19	923.57	25.153
213.00	233.35	1126.47	677.21	23.513	293.00	319.81	1542.39	926.68	25.171
214.00	234.44	1131.67	680.33	23.538	294.00	320.89	1547.59	929.80	25.189
215.00	235.52	1136.87	683.45	23.562	295.00	321.97	1552.78	932.92	25.207
216.00	236.60	1142.07	686.57	23.586	296.00	323.05	1557.98	936.04	25.224
217.00	237.68	1147.27	689.69	23.610	297.00	324.13	1563.18	939.15	25.242
218.00	238.76	1152.48	692.81	23.634	298.00	325.21	1568.37	942.27	25.259
219.00	239.84	1157.68	695.93	23.658	299.00	326.29	1573.57	945.39	25.277
220.00	240.92	1162.88	699.05	23.682	300.00	327.37	1578.77	948.51	25.294

20.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.90	16.60	4.65	1.882
4.00	6.06	18.65	6.37	2.493
5.00	6.28	21.31	8.57	3.105
6.00	6.59	24.61	11.25	3.702
7.00	7.01	28.42	14.22	4.293
8.00	7.56	33.07	17.76	4.913
9.00	8.26	38.69	21.95	5.574
10.00	9.13	44.98	26.48	6.236
11.00	10.14	51.65	31.10	6.871
12.00	11.25	58.44	35.64	7.462
13.00	12.42	65.19	40.03	8.003
14.00	13.61	71.83	44.26	8.495
15.00	14.80	78.34	48.34	8.944
16.00	16.00	84.72	52.29	9.355
17.00	17.19	90.97	56.14	9.735
18.00	18.37	97.12	59.90	10.086
19.00	19.54	103.18	63.58	10.414
20.00	20.70	109.15	67.20	10.720
21.00	21.85	115.06	70.77	11.008
22.00	23.00	120.91	74.30	11.281
23.00	24.14	126.71	77.79	11.538
24.00	25.27	132.45	81.25	11.783
25.00	26.39	138.16	84.68	12.016
26.00	27.51	143.83	88.08	12.238
27.00	28.62	149.47	91.46	12.451
28.00	29.73	155.08	94.82	12.655
29.00	30.84	160.66	98.17	12.851
30.00	31.94	166.22	101.50	13.039
31.00	33.03	171.76	104.82	13.221
32.00	34.12	177.27	108.12	13.396
33.00	35.21	182.77	111.41	13.565
34.00	36.30	188.26	114.69	13.729
35.00	37.38	193.73	117.97	13.887
36.00	38.46	199.18	121.23	14.041
37.00	39.54	204.62	124.49	14.190
38.00	40.62	210.05	127.74	14.335
39.00	41.69	215.47	130.98	14.476
40.00	42.76	220.88	134.21	14.613
41.00	43.83	226.28	137.44	14.746
42.00	44.90	231.67	140.67	14.876
43.00	45.97	237.05	143.89	15.002
44.00	47.03	242.42	147.10	15.126
45.00	48.10	247.79	150.32	15.247
46.00	49.16	253.15	153.52	15.364
47.00	50.22	258.50	156.73	15.480
48.00	51.28	263.85	159.93	15.592
49.00	52.34	269.19	163.12	15.702
50.00	53.39	274.52	166.32	15.810
51.00	54.45	279.85	169.51	15.916
52.00	55.51	285.18	172.69	16.019
53.00	56.56	290.50	175.88	16.120
54.00	57.61	295.82	179.06	16.220
55.00	58.67	301.13	182.24	16.317
56.00	59.72	306.44	185.42	16.413
57.00	60.77	311.74	188.59	16.507
58.00	61.82	317.05	191.77	16.599
59.00	62.87	322.34	194.94	16.690
60.00	63.92	327.64	198.11	16.779
61.00	64.96	332.93	201.28	16.866
62.00	66.01	338.22	204.45	16.952
63.00	67.06	343.51	207.61	17.037
64.00	68.10	348.79	210.77	17.120
65.00	69.15	354.07	213.94	17.202
66.00	70.19	359.35	217.10	17.282
67.00	71.24	364.63	220.26	17.362
68.00	72.28	369.90	223.42	17.440
69.00	73.33	375.17	226.57	17.517
70.00	74.37	380.44	229.73	17.593
71.00	75.41	385.71	232.88	17.667
72.00	76.45	390.98	236.04	17.741
73.00	77.50	396.24	239.19	17.814
74.00	78.54	401.50	242.34	17.885
75.00	79.58	406.76	245.49	17.956
76.00	80.62	412.02	248.64	18.025
77.00	81.66	417.28	251.79	18.094
78.00	82.70	422.53	254.94	18.162
79.00	83.74	427.79	258.09	18.229
80.00	84.78	433.04	261.23	18.295
81.00	85.82	438.29	264.38	18.360
82.00	86.86	443.54	267.53	18.425
83.00	87.89	448.79	270.67	18.488
84.00	88.93	454.04	273.81	18.551
85.00	89.97	459.28	276.96	18.613
86.00	91.01	464.53	280.10	18.675
87.00	92.04	469.77	283.24	18.735
88.00	93.08	475.02	286.38	18.795
89.00	94.12	480.26	289.52	18.854
90.00	95.15	485.50	292.66	18.913
91.00	96.19	490.74	295.80	18.971
92.00	97.23	495.98	298.94	19.028
93.00	98.26	501.22	302.08	19.085
94.00	99.30	506.45	305.22	19.141
95.00	100.33	511.69	308.36	19.196
96.00	101.37	516.93	311.50	19.251
97.00	102.40	522.16	314.63	19.305
98.00	103.44	527.39	317.77	19.359
99.00	104.47	532.63	320.91	19.412
100.00	105.51	537.86	324.04	19.465
101.00	106.54	543.09	327.18	19.517
102.00	107.58	548.32	330.31	19.568
103.00	108.61	553.55	333.45	19.619
104.00	109.64	558.78	336.58	19.670
105.00	110.68	564.01	339.71	19.720
106.00	111.71	569.24	342.85	19.769
107.00	112.75	574.47	345.98	19.818
108.00	113.78	579.69	349.11	19.867
109.00	114.81	584.92	352.25	19.915
110.00	115.85	590.14	355.38	19.963
111.00	116.88	595.37	358.51	20.010
112.00	117.91	600.59	361.64	20.057
113.00	118.94	605.82	364.77	20.103
114.00	119.98	611.04	367.90	20.149
115.00	121.01	616.27	371.04	20.195
116.00	122.04	621.49	374.17	20.240
117.00	123.07	626.71	377.30	20.285
118.00	124.10	631.93	380.43	20.330
119.00	125.14	637.15	383.56	20.374
120.00	126.17	642.37	386.69	20.417
121.00	127.20	647.59	389.82	20.461
122.00	128.23	652.81	392.94	20.504
123.00	129.26	658.03	396.07	20.546
124.00	130.30	663.25	399.20	20.588
125.00	131.33	668.47	402.33	20.630
126.00	132.36	673.69	405.46	20.672
127.00	133.39	678.91	408.59	20.713
128.00	134.42	684.12	411.71	20.754
129.00	135.45	689.34	414.84	20.795
130.00	136.48	694.56	417.97	20.835
131.00	137.51	699.77	421.10	20.875
132.00	138.54	704.99	424.22	20.915
133.00	139.57	710.21	427.35	20.954
134.00	140.60	715.42	430.48	20.993
135.00	141.64	720.64	433.60	21.032
136.00	142.67	725.85	436.73	21.070
137.00	143.70	731.07	439.86	21.109
138.00	144.73	736.28	442.98	21.146
139.00	145.76	741.49	446.11	21.184
140.00	146.79	746.71	449.24	21.221

TEMPER-ATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPER-ATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	147.82	751.92	452.36	21.259	221.00	230.08	1168.39	702.12	23.598
142.00	148.85	757.13	455.49	21.295	222.00	231.11	1173.59	705.24	23.622
143.00	149.88	762.35	458.61	21.332	223.00	232.14	1178.79	708.36	23.645
144.00	150.91	767.56	461.74	21.368	224.00	233.16	1183.99	711.47	23.668
145.00	151.94	772.77	464.86	21.404	225.00	234.19	1189.19	714.59	23.692
146.00	152.97	777.98	467.99	21.440	226.00	235.22	1194.39	717.71	23.715
147.00	154.00	783.19	471.11	21.476	227.00	236.24	1199.60	720.83	23.738
148.00	155.03	788.41	474.24	21.511	228.00	237.27	1204.80	723.95	23.760
149.00	156.06	793.62	477.36	21.546	229.00	238.30	1210.00	727.07	23.783
150.00	157.08	798.83	480.49	21.581	230.00	239.33	1215.20	730.19	23.806
151.00	158.11	804.04	483.61	21.616	231.00	240.35	1220.40	733.31	23.828
152.00	159.14	809.25	486.74	21.650	232.00	241.38	1225.60	736.43	23.851
153.00	160.17	814.46	489.86	21.684	233.00	242.41	1230.80	739.55	23.873
154.00	161.20	819.67	492.98	21.718	234.00	243.43	1236.00	742.67	23.896
155.00	162.23	824.88	496.11	21.752	235.00	244.46	1241.20	745.79	23.918
156.00	163.26	830.09	499.23	21.785	236.00	245.49	1246.40	748.90	23.940
157.00	164.29	835.30	502.36	21.819	237.00	246.51	1251.60	752.02	23.962
158.00	165.32	840.51	505.48	21.852	238.00	247.54	1256.80	755.14	23.984
159.00	166.35	845.72	508.60	21.885	239.00	248.57	1262.00	758.26	24.006
160.00	167.38	850.92	511.73	21.917	240.00	249.60	1267.20	761.38	24.027
161.00	168.41	856.13	514.85	21.950	241.00	250.62	1272.40	764.50	24.049
162.00	169.43	861.34	517.97	21.982	242.00	251.65	1277.60	767.62	24.070
163.00	170.46	866.55	521.10	22.014	243.00	252.68	1282.80	770.74	24.092
164.00	171.49	871.76	524.22	22.046	244.00	253.70	1288.00	773.86	24.113
165.00	172.52	876.97	527.34	22.078	245.00	254.73	1293.20	776.97	24.134
166.00	173.55	882.17	530.46	22.109	246.00	255.76	1298.40	780.09	24.156
167.00	174.58	887.38	533.59	22.140	247.00	256.78	1303.60	783.21	24.177
168.00	175.61	892.59	536.71	22.171	248.00	257.81	1308.80	786.33	24.198
169.00	176.64	897.80	539.83	22.202	249.00	258.84	1314.00	789.45	24.219
170.00	177.66	903.00	542.95	22.233	250.00	259.86	1319.20	792.57	24.239
171.00	178.69	908.21	546.08	22.264	251.00	260.89	1324.39	795.69	24.260
172.00	179.72	913.42	549.20	22.294	252.00	261.92	1329.59	798.81	24.281
173.00	180.75	918.62	552.32	22.324	253.00	262.94	1334.79	801.92	24.302
174.00	181.78	923.83	555.44	22.354	254.00	263.97	1339.99	805.04	24.322
175.00	182.81	929.03	558.57	22.384	255.00	265.00	1345.19	808.16	24.342
176.00	183.84	934.24	561.69	22.414	256.00	266.02	1350.39	811.28	24.363
177.00	184.86	939.45	564.81	22.443	257.00	267.05	1355.59	814.40	24.383
178.00	185.89	944.65	567.93	22.472	258.00	268.08	1360.79	817.52	24.403
179.00	186.92	949.86	571.05	22.502	259.00	269.10	1365.99	820.63	24.423
180.00	187.95	955.06	574.18	22.531	260.00	270.13	1371.19	823.75	24.443
181.00	188.98	960.27	577.30	22.559	261.00	271.16	1376.38	826.87	24.463
182.00	190.01	965.47	580.42	22.588	262.00	272.18	1381.58	829.99	24.483
183.00	191.03	970.68	583.54	22.617	263.00	273.21	1386.78	833.11	24.503
184.00	192.06	975.88	586.66	22.645	264.00	274.24	1391.98	836.23	24.523
185.00	193.09	981.09	589.78	22.673	265.00	275.26	1397.18	839.34	24.542
186.00	194.12	986.29	592.90	22.701	266.00	276.29	1402.38	842.46	24.562
187.00	195.15	991.50	596.03	22.729	267.00	277.32	1407.58	845.58	24.582
188.00	196.17	996.70	599.15	22.757	268.00	278.34	1412.77	848.70	24.601
189.00	197.20	1001.91	602.27	22.785	269.00	279.37	1417.97	851.82	24.620
190.00	198.23	1007.11	605.39	22.812	270.00	280.40	1423.17	854.93	24.640
191.00	199.26	1012.32	608.51	22.839	271.00	281.42	1428.37	858.05	24.659
192.00	200.28	1017.52	611.63	22.867	272.00	282.45	1433.57	861.17	24.678
193.00	201.31	1022.72	614.75	22.894	273.00	283.47	1438.77	864.29	24.697
194.00	202.34	1027.93	617.87	22.920	274.00	284.50	1443.96	867.41	24.716
195.00	203.37	1033.13	620.99	22.947	275.00	285.53	1449.16	870.52	24.735
196.00	204.40	1038.33	624.11	22.974	276.00	286.55	1454.36	873.64	24.754
197.00	205.42	1043.54	627.23	23.000	277.00	287.58	1459.56	876.76	24.773
198.00	206.45	1048.74	630.36	23.027	278.00	288.61	1464.76	879.88	24.791
199.00	207.48	1053.94	633.48	23.053	279.00	289.63	1469.95	883.00	24.810
200.00	208.51	1059.15	636.60	23.079	280.00	290.66	1475.15	886.11	24.829
201.00	209.53	1064.35	639.72	23.105	281.00	291.69	1480.35	889.23	24.847
202.00	210.56	1069.55	642.84	23.131	282.00	292.71	1485.55	892.35	24.866
203.00	211.59	1074.76	645.96	23.156	283.00	293.74	1490.75	895.47	24.884
204.00	212.62	1079.96	649.08	23.182	284.00	294.77	1495.94	898.59	24.902
205.00	213.64	1085.16	652.20	23.207	285.00	295.79	1501.14	901.70	24.921
206.00	214.67	1090.36	655.32	23.233	286.00	296.82	1506.34	904.82	24.939
207.00	215.70	1095.57	658.44	23.258	287.00	297.84	1511.54	907.94	24.957
208.00	216.73	1100.77	661.56	23.283	288.00	298.87	1516.73	911.06	24.975
209.00	217.75	1105.97	664.68	23.308	289.00	299.90	1521.93	914.18	24.993
210.00	218.78	1111.17	667.80	23.333	290.00	300.92	1527.13	917.29	25.011
211.00	219.81	1116.37	670.92	23.357	291.00	301.95	1532.33	920.41	25.029
212.00	220.84	1121.58	674.04	23.382	292.00	302.98	1537.53	923.53	25.047
213.00	221.86	1126.78	677.16	23.407	293.00	304.00	1542.72	926.65	25.065
214.00	222.89	1131.98	680.28	23.431	294.00	305.03	1547.92	929.76	25.082
215.00	223.92	1137.18	683.40	23.455	295.00	306.05	1553.12	932.88	25.100
216.00	224.95	1142.38	686.52	23.479	296.00	307.08	1558.31	936.00	25.117
217.00	225.97	1147.58	689.64	23.503	297.00	308.11	1563.51	939.12	25.135
218.00	227.00	1152.79	692.76	23.527	298.00	309.13	1568.71	942.23	25.152
219.00	228.03	1157.99	695.88	23.551	299.00	310.16	1573.91	945.35	25.170
220.00	229.06	1163.19	699.00	23.575	300.00	311.19	1579.10	948.47	25.187

21.00 ATMOSPHERE 1SO8AR

TEMPER-ATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPER-ATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
					61.00	62.00	333.04	201.12	16.762
					62.00	62.99	338.33	204.29	16.848
					63.00	63.99	343.62	207.46	16.933
					64.00	64.99	348.91	210.62	17.016
					65.00	65.98	354.20	213.79	17.098
					66.00	66.98	359.48	216.95	17.179
					67.00	67.98	364.76	220.11	17.258
					68.00	68.97	370.03	223.27	17.337
					69.00	69.97	375.31	226.43	17.414
					70.00	70.96	380.58	229.59	17.489
					71.00	71.95	385.85	232.75	17.564
					72.00	72.95	391.12	235.90	17.638
					73.00	73.94	396.39	239.06	17.711
					74.00	74.93	401.65	242.21	17.782
					75.00	75.92	406.92	245.36	17.853
					76.00	76.91	412.18	248.51	17.923
					77.00	77.91	417.44	251.66	17.991
					78.00	78.90	422.70	254.81	18.059
					79.00	79.89	427.95	257.96	18.126
					80.00	80.88	433.21	261.11	18.192
					81.00	81.87	438.46	264.26	18.257
					82.00	82.86	443.72	267.40	18.322
3.00	5.86	17.15	4.67	1.868	83.00	83.85	448.97	270.55	18.386
4.00	6.02	19.19	6.37	2.474	84.00	84.84	454.22	273.70	18.448
5.00	6.24	21.81	8.54	3.079	85.00	85.82	459.46	276.84	18.511
6.00	6.53	25.06	11.16	3.667	86.00	86.81	464.71	279.98	18.572
7.00	6.92	28.80	14.06	4.246	87.00	87.80	469.96	283.13	18.633
8.00	7.43	33.35	17.53	4.852	88.00	88.79	475.20	286.27	18.693
9.00	8.09	38.83	21.63	5.497	89.00	89.78	480.45	289.41	18.752
10.00	8.89	44.97	26.07	6.144	90.00	90.77	485.69	292.55	18.810
11.00	9.82	51.51	30.62	6.767	91.00	91.75	490.93	295.69	18.868
12.00	10.85	58.21	35.13	7.350	92.00	92.74	496.17	298.83	18.926
13.00	11.94	64.92	39.52	7.887	93.00	93.73	501.41	301.97	18.982
14.00	13.05	71.54	43.76	8.377	94.00	94.71	506.65	305.11	19.038
15.00	14.19	78.04	47.85	8.826	95.00	95.70	511.89	308.25	19.094
16.00	15.32	84.42	51.82	9.238	96.00	96.69	517.13	311.39	19.149
17.00	16.45	90.69	55.69	9.618	97.00	97.67	522.36	314.53	19.203
18.00	17.57	96.85	59.46	9.970	98.00	98.66	527.60	317.67	19.256
19.00	18.68	102.92	63.17	10.298	99.00	99.64	532.83	320.80	19.310
20.00	19.79	108.92	66.81	10.606	100.00	100.63	538.07	323.94	19.362
21.00	20.89	114.84	70.39	10.895	101.00	101.62	543.30	327.08	19.414
22.00	21.98	120.70	73.93	11.168	102.00	102.60	548.53	330.21	19.466
23.00	23.06	126.52	77.44	11.426	103.00	103.59	553.77	333.35	19.517
24.00	24.14	132.28	80.90	11.671	104.00	104.57	559.00	336.48	19.567
25.00	25.22	138.00	84.34	11.905	105.00	105.56	564.23	339.62	19.617
26.00	26.28	143.69	87.76	12.128	106.00	106.54	569.46	342.75	19.667
27.00	27.34	149.34	91.15	12.341	107.00	107.53	574.69	345.89	19.716
28.00	28.40	154.96	94.52	12.545	108.00	108.51	579.91	349.02	19.765
29.00	29.45	160.55	97.88	12.742	109.00	109.49	585.14	352.15	19.813
30.00	30.50	166.12	101.21	12.931	110.00	110.48	590.37	355.29	19.861
31.00	31.55	171.67	104.54	13.113	111.00	111.46	595.60	358.42	19.908
32.00	32.59	177.20	107.85	13.288	112.00	112.45	600.82	361.55	19.955
33.00	33.63	182.71	111.15	13.458	113.00	113.43	606.05	364.68	20.001
34.00	34.67	188.20	114.44	13.622	114.00	114.41	611.27	367.81	20.047
35.00	35.70	193.68	117.72	13.780	115.00	115.40	616.50	370.95	20.093
36.00	36.73	199.14	120.99	13.934	116.00	116.38	621.72	374.08	20.138
37.00	37.76	204.59	124.25	14.084	117.00	117.36	626.94	377.21	20.183
38.00	38.78	210.03	127.50	14.229	118.00	118.35	632.17	380.34	20.228
39.00	39.81	215.46	130.75	14.370	119.00	119.33	637.39	383.47	20.272
40.00	40.83	220.87	133.99	14.507	120.00	120.31	642.61	386.60	20.315
41.00	41.85	226.28	137.22	14.640	121.00	121.30	647.83	389.73	20.359
42.00	42.87	231.68	140.45	14.770	122.00	122.28	653.05	392.86	20.402
43.00	43.89	237.06	143.68	14.897	123.00	123.26	658.28	395.99	20.444
44.00	44.90	242.44	146.90	15.021	124.00	124.24	663.50	399.12	20.486
45.00	45.92	247.82	150.11	15.141	125.00	125.23	668.72	402.25	20.528
46.00	46.93	253.18	153.32	15.259	126.00	126.21	673.93	405.38	20.570
47.00	47.94	258.54	156.53	15.375	127.00	127.19	679.15	408.51	20.611
48.00	48.95	263.89	159.73	15.487	128.00	128.17	684.37	411.63	20.652
49.00	49.96	269.24	162.93	15.598	129.00	129.16	689.59	414.76	20.693
50.00	50.97	274.58	166.13	15.706	130.00	130.14	694.81	417.89	20.733
51.00	51.97	279.92	169.32	15.811	131.00	131.12	700.03	421.02	20.773
52.00	52.98	285.25	172.51	15.915	132.00	132.10	705.24	424.15	20.813
53.00	53.98	290.57	175.70	16.016	133.00	133.08	710.46	427.27	20.852
54.00	54.99	295.90	178.89	16.116	134.00	134.07	715.68	430.40	20.891
55.00	55.99	301.21	182.07	16.213	135.00	135.05	720.89	433.53	20.930
56.00	56.99	306.53	185.25	16.309	136.00	136.03	726.11	436.66	20.968
57.00	58.00	311.84	188.43	16.403	137.00	137.01	731.32	439.78	21.007
58.00	59.00	317.14	191.60	16.495	138.00	137.99	736.54	442.91	21.045
59.00	60.00	322.45	194.78	16.586	139.00	138.97	741.75	446.04	21.082
60.00	61.00	327.74	197.95	16.675	140.00	139.95	746.97	449.16	21.120

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	140.94	752.18	452.29	21.157	221.00	219.30	1168.70	702.07	23.497
142.00	141.92	757.40	455.41	21.194	222.00	220.27	1173.90	705.19	23.520
143.00	142.90	762.61	458.54	21.230	223.00	221.25	1179.10	708.31	23.544
144.00	143.88	767.82	461.67	21.266	224.00	222.23	1184.31	711.43	23.567
145.00	144.86	773.04	464.79	21.303	225.00	223.21	1189.51	714.55	23.590
146.00	145.84	778.25	467.92	21.338	226.00	224.19	1194.71	717.67	23.613
147.00	146.82	783.46	471.04	21.374	227.00	225.17	1199.91	720.79	23.636
148.00	147.80	788.67	474.17	21.409	228.00	226.14	1205.11	723.90	23.659
149.00	148.78	793.89	477.29	21.444	229.00	227.12	1210.31	727.02	23.682
150.00	149.76	799.10	480.42	21.479	230.00	228.10	1215.51	730.14	23.704
151.00	150.74	804.31	483.54	21.514	231.00	229.08	1220.71	733.26	23.727
152.00	151.73	809.52	486.67	21.548	232.00	230.06	1225.91	736.38	23.749
153.00	152.71	814.73	489.79	21.582	233.00	231.03	1231.12	739.50	23.772
154.00	153.69	819.94	492.92	21.616	234.00	232.01	1236.32	742.62	23.794
155.00	154.67	825.15	496.04	21.650	235.00	232.99	1241.52	745.74	23.816
156.00	155.65	830.36	499.16	21.684	236.00	233.97	1246.72	748.86	23.838
157.00	156.63	835.57	502.29	21.717	237.00	234.95	1251.92	751.98	23.860
158.00	157.61	840.78	505.41	21.750	238.00	235.92	1257.12	755.10	23.882
159.00	158.59	845.99	508.54	21.783	239.00	236.90	1262.32	758.22	23.904
160.00	159.57	851.20	511.66	21.816	240.00	237.88	1267.52	761.34	23.926
161.00	160.55	856.41	514.78	21.848	241.00	238.86	1272.72	764.45	23.947
162.00	161.53	861.62	517.91	21.880	242.00	239.84	1277.92	767.57	23.969
163.00	162.51	866.83	521.03	21.912	243.00	240.82	1283.12	770.69	23.990
164.00	163.49	872.04	524.15	21.944	244.00	241.79	1288.32	773.81	24.012
165.00	164.47	877.25	527.28	21.976	245.00	242.77	1293.52	776.93	24.033
166.00	165.45	882.46	530.40	22.007	246.00	243.75	1298.72	780.05	24.054
167.00	166.43	887.66	533.52	22.039	247.00	244.73	1303.92	783.17	24.075
168.00	167.41	892.87	536.65	22.070	248.00	245.71	1309.12	786.29	24.096
169.00	168.39	898.08	539.77	22.101	249.00	246.68	1314.32	789.41	24.117
170.00	169.37	903.29	542.89	22.131	250.00	247.66	1319.52	792.52	24.138
171.00	170.35	908.49	546.02	22.162	251.00	248.64	1324.72	795.64	24.159
172.00	171.33	913.70	549.14	22.192	252.00	249.62	1329.92	798.76	24.179
173.00	172.31	918.91	552.26	22.222	253.00	250.59	1335.12	801.88	24.200
174.00	173.29	924.12	555.38	22.252	254.00	251.57	1340.32	805.00	24.221
175.00	174.27	929.32	558.51	22.282	255.00	252.55	1345.52	808.12	24.241
176.00	175.25	934.53	561.63	22.312	256.00	253.53	1350.71	811.24	24.261
177.00	176.22	939.74	564.75	22.341	257.00	254.51	1355.91	814.36	24.282
178.00	177.20	944.94	567.87	22.371	258.00	255.48	1361.11	817.47	24.302
179.00	178.18	950.15	570.99	22.400	259.00	256.46	1366.31	820.59	24.322
180.00	179.16	955.35	574.12	22.429	260.00	257.44	1371.51	823.71	24.342
181.00	180.14	960.56	577.24	22.458	261.00	258.42	1376.71	826.83	24.362
182.00	181.12	965.77	580.36	22.486	262.00	259.39	1381.91	829.95	24.382
183.00	182.10	970.97	583.48	22.515	263.00	260.37	1387.11	833.07	24.402
184.00	183.08	976.18	586.60	22.543	264.00	261.35	1392.31	836.18	24.421
185.00	184.06	981.38	589.73	22.572	265.00	262.33	1397.51	839.30	24.441
186.00	185.04	986.59	592.85	22.600	266.00	263.31	1402.71	842.42	24.461
187.00	186.02	991.79	595.97	22.628	267.00	264.28	1407.90	845.54	24.480
188.00	187.00	997.00	599.09	22.655	268.00	265.26	1413.10	848.66	24.499
189.00	187.98	1002.20	602.21	22.683	269.00	266.24	1418.30	851.78	24.519
190.00	188.96	1007.41	605.33	22.710	270.00	267.22	1423.50	854.89	24.538
191.00	189.93	1012.61	608.45	22.738	271.00	268.19	1428.70	858.01	24.557
192.00	190.91	1017.82	611.58	22.765	272.00	269.17	1433.90	861.13	24.576
193.00	191.89	1023.02	614.70	22.792	273.00	270.15	1439.10	864.25	24.596
194.00	192.87	1028.23	617.82	22.819	274.00	271.13	1444.29	867.37	24.615
195.00	193.85	1033.43	620.94	22.846	275.00	272.10	1449.49	870.49	24.633
196.00	194.83	1038.63	624.06	22.872	276.00	273.08	1454.69	873.60	24.652
197.00	195.81	1043.84	627.18	22.899	277.00	274.06	1459.89	876.72	24.671
198.00	196.79	1049.04	630.30	22.925	278.00	275.04	1465.09	879.84	24.690
199.00	197.77	1054.25	633.42	22.951	279.00	276.02	1470.29	882.96	24.709
200.00	198.75	1059.45	636.54	22.977	280.00	276.99	1475.48	886.08	24.727
201.00	199.72	1064.65	639.66	23.003	281.00	277.97	1480.68	889.19	24.746
202.00	200.70	1069.86	642.78	23.029	282.00	278.95	1485.88	892.31	24.764
203.00	201.68	1075.06	645.91	23.055	283.00	279.93	1491.08	895.43	24.783
204.00	202.66	1080.26	649.03	23.080	284.00	280.90	1496.28	898.55	24.801
205.00	203.64	1085.47	652.15	23.106	285.00	281.88	1501.47	901.67	24.819
206.00	204.62	1090.67	655.27	23.131	286.00	282.86	1506.67	904.78	24.837
207.00	205.60	1095.87	658.39	23.156	287.00	283.84	1511.87	907.90	24.856
208.00	206.57	1101.07	661.51	23.181	288.00	284.81	1517.07	911.02	24.874
209.00	207.55	1106.28	664.63	23.206	289.00	285.79	1522.27	914.14	24.892
210.00	208.53	1111.48	667.75	23.231	290.00	286.77	1527.46	917.26	24.910
211.00	209.51	1116.68	670.87	23.256	291.00	287.75	1532.66	920.37	24.927
212.00	210.49	1121.88	673.99	23.280	292.00	288.72	1537.86	923.49	24.945
213.00	211.47	1127.09	677.11	23.305	293.00	289.70	1543.06	926.61	24.963
214.00	212.45	1132.29	680.23	23.329	294.00	290.68	1548.26	929.73	24.981
215.00	213.42	1137.49	683.35	23.354	295.00	291.66	1553.45	932.84	24.998
216.00	214.40	1142.69	686.47	23.378	296.00	292.63	1558.65	935.96	25.016
217.00	215.38	1147.89	689.59	23.402	297.00	293.61	1563.85	939.08	25.034
218.00	216.36	1153.10	692.71	23.426	298.00	294.59	1569.05	942.20	25.051
219.00	217.34	1158.30	695.83	23.449	299.00	295.57	1574.24	945.32	25.068
220.00	218.32	1163.50	698.95	23.473	300.00	296.54	1579.44	948.43	25.086

22.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.83	17.71	4.70	1.855
4.00	5.99	19.72	6.38	2.456
5.00	6.19	22.32	8.51	3.054
6.00	6.47	25.51	11.08	3.633
7.00	6.85	29.19	13.93	4.202
8.00	7.32	33.64	17.31	4.795
9.00	7.93	39.01	21.33	5.427
10.00	8.67	45.02	25.69	6.059
11.00	9.53	51.43	30.19	6.671
12.00	10.49	58.04	34.66	7.246
13.00	11.51	64.69	39.04	7.778
14.00	12.56	71.28	43.28	8.266
15.00	13.63	77.77	47.39	8.714
16.00	14.71	84.15	51.37	9.126
17.00	15.78	90.43	55.25	9.506
18.00	16.85	96.60	59.04	9.859
19.00	17.91	102.69	62.76	10.188
20.00	18.97	108.70	66.42	10.497
21.00	20.02	114.64	70.02	10.786
22.00	21.06	120.51	73.57	11.060
23.00	22.09	126.34	77.09	11.319
24.00	23.12	132.12	80.57	11.565
25.00	24.15	137.85	84.02	11.799
26.00	25.17	143.55	87.44	12.022
27.00	26.18	149.21	90.84	12.236
28.00	27.19	154.85	94.23	12.441
29.00	28.20	160.45	97.59	12.638
30.00	29.20	166.04	100.93	12.827
31.00	30.20	171.59	104.26	13.009
32.00	31.20	177.13	107.58	13.185
33.00	32.19	182.65	110.89	13.355
34.00	33.18	188.15	114.18	13.519
35.00	34.17	193.64	117.47	13.678
36.00	35.16	199.11	120.74	13.832
37.00	36.14	204.57	124.01	13.982
38.00	37.12	210.02	127.27	14.127
39.00	38.10	215.45	130.52	14.268
40.00	39.07	220.87	133.77	14.406
41.00	40.05	226.29	137.01	14.539
42.00	41.02	231.69	140.24	14.669
43.00	42.00	237.09	143.47	14.796
44.00	42.97	242.47	146.69	14.920
45.00	43.93	247.85	149.91	15.041
46.00	44.90	253.22	153.13	15.159
47.00	45.87	258.59	156.34	15.275
48.00	46.83	263.95	159.54	15.387
49.00	47.80	269.30	162.75	15.498
50.00	48.76	274.64	165.95	15.606
51.00	49.72	279.99	169.14	15.712
52.00	50.68	285.32	172.34	15.815
53.00	51.64	290.65	175.53	15.917
54.00	52.60	295.98	178.71	16.016
55.00	53.56	301.30	181.90	16.114
56.00	54.52	306.62	185.08	16.210
57.00	55.48	311.93	188.26	16.304
58.00	56.43	317.24	191.44	16.396
59.00	57.39	322.55	194.62	16.487
60.00	58.34	327.85	197.79	16.576
61.00	59.30	333.15	200.97	16.664
62.00	60.25	338.45	204.14	16.750
63.00	61.20	343.74	207.31	16.834
64.00	62.16	349.03	210.48	16.918
65.00	63.11	354.32	213.64	17.000
66.00	64.06	359.61	216.81	17.080
67.00	65.01	364.89	219.97	17.160
68.00	65.96	370.17	223.13	17.238
69.00	66.91	375.45	226.29	17.315
70.00	67.86	380.72	229.45	17.391
71.00	68.81	386.00	232.61	17.466
72.00	69.76	391.27	235.77	17.540
73.00	70.71	396.54	238.92	17.612
74.00	71.65	401.81	242.08	17.684
75.00	72.60	407.07	245.23	17.755
76.00	73.55	412.34	248.39	17.824
77.00	74.49	417.60	251.54	17.893
78.00	75.44	422.86	254.69	17.961
79.00	76.39	428.12	257.84	18.028
80.00	77.33	433.38	260.99	18.094
81.00	78.28	438.63	264.14	18.159
82.00	79.22	443.89	267.28	18.224
83.00	80.17	449.14	270.43	18.288
84.00	81.11	454.40	273.58	18.351
85.00	82.06	459.65	276.72	18.413
86.00	83.00	464.90	279.87	18.474
87.00	83.94	470.14	283.01	18.535
88.00	84.89	475.39	286.16	18.595
89.00	85.83	480.64	289.30	18.654
90.00	86.78	485.88	292.44	18.713
91.00	87.72	491.13	295.59	18.771
92.00	88.66	496.37	298.73	18.828
93.00	89.60	501.61	301.87	18.884
94.00	90.55	506.85	305.01	18.941
95.00	91.49	512.09	308.15	18.996
96.00	92.43	517.33	311.29	19.051
97.00	93.37	522.57	314.43	19.105
98.00	94.31	527.81	317.56	19.159
99.00	95.25	533.04	320.70	19.212
100.00	96.20	538.28	323.84	19.265
101.00	97.14	543.51	326.98	19.317
102.00	98.08	548.75	330.11	19.368
103.00	99.02	553.98	333.25	19.419
104.00	99.96	559.21	336.39	19.470
105.00	100.90	564.45	339.52	19.520
106.00	101.84	569.68	342.66	19.570
107.00	102.78	574.91	345.79	19.619
108.00	103.72	580.14	348.93	19.667
109.00	104.66	585.37	352.06	19.716
110.00	105.60	590.60	355.19	19.763
111.00	106.54	595.82	358.33	19.811
112.00	107.48	601.05	361.46	19.857
113.00	108.42	606.28	364.59	19.904
114.00	109.36	611.50	367.73	19.950
115.00	110.30	616.73	370.86	19.996
116.00	111.23	621.96	373.99	20.041
117.00	112.17	627.18	377.12	20.086
118.00	113.11	632.40	380.25	20.130
119.00	114.05	637.63	383.38	20.174
120.00	114.99	642.85	386.51	20.218
121.00	115.93	648.07	389.65	20.261
122.00	116.87	653.30	392.78	20.304
123.00	117.81	658.52	395.91	20.347
124.00	118.74	663.74	399.04	20.389
125.00	119.68	668.96	402.17	20.431
126.00	120.62	674.18	405.30	20.473
127.00	121.56	679.40	408.42	20.514
128.00	122.50	684.62	411.55	20.555
129.00	123.43	689.84	414.68	20.596
130.00	124.37	695.06	417.81	20.636
131.00	125.31	700.28	420.94	20.676
132.00	126.25	705.50	424.07	20.716
133.00	127.18	710.71	427.20	20.755
134.00	128.12	715.93	430.32	20.794
135.00	129.06	721.15	433.45	20.833
136.00	129.99	726.36	436.58	20.871
137.00	130.93	731.58	439.71	20.909
138.00	131.87	736.80	442.83	20.947
139.00	132.81	742.01	445.96	20.985
140.00	133.74	747.23	449.09	21.022

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	134.68	752.44	452.21	21.060	221.00	209.49	1169.01	702.02	23.400
142.00	135.62	757.66	455.34	21.096	222.00	210.42	1174.22	705.14	23.423
143.00	136.55	762.87	458.47	21.133	223.00	211.36	1179.42	708.26	23.447
144.00	137.49	768.09	461.59	21.169	224.00	212.29	1184.62	711.38	23.470
145.00	138.43	773.30	464.72	21.205	225.00	213.22	1189.82	714.50	23.493
146.00	139.36	778.51	467.85	21.241	226.00	214.16	1195.02	717.62	23.516
147.00	140.30	783.73	470.97	21.277	227.00	215.09	1200.22	720.74	23.539
148.00	141.24	788.94	474.10	21.312	228.00	216.03	1205.43	723.86	23.562
149.00	142.17	794.15	477.22	21.347	229.00	216.96	1210.63	726.98	23.585
150.00	143.11	799.37	480.35	21.382	230.00	217.89	1215.83	730.10	23.608
151.00	144.05	804.58	483.47	21.417	231.00	218.83	1221.03	733.22	23.630
152.00	144.98	809.79	486.60	21.451	232.00	219.76	1226.23	736.34	23.653
153.00	145.92	815.00	489.72	21.485	233.00	220.70	1231.43	739.46	23.675
154.00	146.85	820.21	492.85	21.519	234.00	221.63	1236.63	742.57	23.697
155.00	147.79	825.43	495.97	21.553	235.00	222.56	1241.83	745.69	23.719
156.00	148.73	830.64	499.10	21.587	236.00	223.50	1247.03	748.81	23.741
157.00	149.66	835.85	502.22	21.620	237.00	224.43	1252.24	751.93	23.763
158.00	150.60	841.06	505.35	21.653	238.00	225.36	1257.44	755.05	23.785
159.00	151.53	846.27	508.47	21.686	239.00	226.30	1262.64	758.17	23.807
160.00	152.47	851.48	511.59	21.719	240.00	227.23	1267.84	761.29	23.829
161.00	153.40	856.69	514.72	21.751	241.00	228.17	1273.04	764.41	23.851
162.00	154.34	861.90	517.84	21.783	242.00	229.10	1278.24	767.53	23.872
163.00	155.28	867.11	520.97	21.815	243.00	230.03	1283.44	770.65	23.893
164.00	156.21	872.32	524.09	21.847	244.00	230.97	1288.64	773.77	23.915
165.00	157.15	877.53	527.21	21.879	245.00	231.90	1293.84	776.89	23.936
166.00	158.08	882.74	530.34	21.910	246.00	232.83	1299.04	780.01	23.957
167.00	159.02	887.95	533.46	21.942	247.00	233.77	1304.24	783.12	23.978
168.00	159.95	893.16	536.58	21.973	248.00	234.70	1309.44	786.24	23.999
169.00	160.89	898.36	539.71	22.004	249.00	235.63	1314.64	789.36	24.020
170.00	161.82	903.57	542.83	22.034	250.00	236.57	1319.84	792.48	24.041
171.00	162.76	908.78	545.95	22.065	251.00	237.50	1325.04	795.60	24.062
172.00	163.70	913.99	549.08	22.095	252.00	238.43	1330.24	798.72	24.083
173.00	164.63	919.20	552.20	22.125	253.00	239.37	1335.44	801.84	24.103
174.00	165.57	924.40	555.32	22.155	254.00	240.30	1340.64	804.96	24.124
175.00	166.50	929.61	558.45	22.185	255.00	241.24	1345.84	808.08	24.144
176.00	167.44	934.82	561.57	22.215	256.00	242.17	1351.04	811.19	24.164
177.00	168.37	940.03	564.69	22.244	257.00	243.10	1356.24	814.31	24.185
178.00	169.31	945.23	567.81	22.274	258.00	244.04	1361.44	817.43	24.205
179.00	170.24	950.44	570.94	22.303	259.00	244.97	1366.64	820.55	24.225
180.00	171.18	955.65	574.06	22.332	260.00	245.90	1371.84	823.67	24.245
181.00	172.11	960.85	577.18	22.361	261.00	246.84	1377.04	826.79	24.265
182.00	173.05	966.06	580.30	22.390	262.00	247.77	1382.24	829.91	24.285
183.00	173.98	971.27	583.42	22.418	263.00	248.70	1387.44	833.03	24.305
184.00	174.92	976.47	586.55	22.446	264.00	249.64	1392.63	836.14	24.324
185.00	175.85	981.68	589.67	22.475	265.00	250.57	1397.83	839.26	24.344
186.00	176.79	986.88	592.79	22.503	266.00	251.50	1403.03	842.38	24.364
187.00	177.72	992.09	595.91	22.531	267.00	252.44	1408.23	845.50	24.383
188.00	178.66	997.29	599.03	22.558	268.00	253.37	1413.43	848.62	24.403
189.00	179.59	1002.50	602.16	22.586	269.00	254.30	1418.63	851.74	24.422
190.00	180.52	1007.71	605.28	22.613	270.00	255.24	1423.83	854.85	24.441
191.00	181.46	1012.91	608.40	22.641	271.00	256.17	1429.03	857.97	24.461
192.00	182.39	1018.12	611.52	22.668	272.00	257.10	1434.23	861.09	24.480
193.00	183.33	1023.32	614.64	22.695	273.00	258.04	1439.43	864.21	24.499
194.00	184.26	1028.53	617.76	22.722	274.00	258.97	1444.62	867.33	24.518
195.00	185.20	1033.73	620.88	22.749	275.00	259.90	1449.82	870.45	24.537
196.00	186.13	1038.93	624.01	22.775	276.00	260.84	1455.02	873.56	24.556
197.00	187.07	1044.14	627.13	22.802	277.00	261.77	1460.22	876.68	24.574
198.00	188.00	1049.34	630.25	22.828	278.00	262.70	1465.42	879.80	24.593
199.00	188.94	1054.55	633.37	22.854	279.00	263.64	1470.62	882.92	24.612
200.00	189.87	1059.75	636.49	22.880	280.00	264.57	1475.82	886.04	24.630
201.00	190.81	1064.96	639.61	22.906	281.00	265.50	1481.01	889.16	24.649
202.00	191.74	1070.16	642.73	22.932	282.00	266.43	1486.21	892.27	24.667
203.00	192.67	1075.36	645.85	22.958	283.00	267.37	1491.41	895.39	24.686
204.00	193.61	1080.57	648.97	22.983	284.00	268.30	1496.61	898.51	24.704
205.00	194.54	1085.77	652.09	23.009	285.00	269.23	1501.81	901.63	24.722
206.00	195.48	1090.97	655.21	23.034	286.00	270.17	1507.01	904.75	24.741
207.00	196.41	1096.18	658.34	23.059	287.00	271.10	1512.20	907.86	24.759
208.00	197.35	1101.38	661.46	23.084	288.00	272.03	1517.40	910.98	24.777
209.00	198.28	1106.58	664.58	23.109	289.00	272.97	1522.60	914.10	24.795
210.00	199.21	1111.79	667.70	23.134	290.00	273.90	1527.80	917.22	24.813
211.00	200.15	1116.99	670.82	23.159	291.00	274.83	1533.00	920.34	24.831
212.00	201.08	1122.19	673.94	23.184	292.00	275.77	1538.19	923.45	24.849
213.00	202.02	1127.39	677.06	23.208	293.00	276.70	1543.39	926.57	24.866
214.00	202.95	1132.60	680.18	23.232	294.00	277.63	1548.59	929.69	24.884
215.00	203.88	1137.80	683.30	23.257	295.00	278.57	1553.79	932.81	24.902
216.00	204.82	1143.00	686.42	23.281	296.00	279.50	1558.99	935.93	24.919
217.00	205.75	1148.20	689.54	23.305	297.00	280.43	1564.18	939.04	24.937
218.00	206.69	1153.41	692.66	23.329	298.00	281.36	1569.38	942.16	24.954
219.00	207.62	1158.61	695.78	23.353	299.00	282.30	1574.58	945.28	24.972
220.00	208.55	1163.81	698.90	23.376	300.00	283.23	1579.78	948.40	24.989

23.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
					61.00	56.83	333.27	200.81	16.569
					62.00	57.75	338.57	203.99	16.655
					63.00	58.66	343.86	207.16	16.740
					64.00	59.57	349.16	210.33	16.823
					65.00	60.48	354.45	213.50	16.905
					66.00	61.39	359.74	216.66	16.986
					67.00	62.30	365.02	219.83	17.066
					68.00	63.21	370.31	222.99	17.144
					69.00	64.12	375.59	226.15	17.221
					70.00	65.03	380.87	229.32	17.297
					71.00	65.94	386.15	232.48	17.372
					72.00	66.85	391.42	235.63	17.446
					73.00	67.75	396.69	238.79	17.518
					74.00	68.66	401.96	241.95	17.590
					75.00	69.57	407.23	245.10	17.661
					76.00	70.47	412.50	248.26	17.730
					77.00	71.38	417.76	251.41	17.799
					78.00	72.29	423.03	254.56	17.867
					79.00	73.19	428.29	257.72	17.934
					80.00	74.10	433.55	260.87	18.000
					81.00	75.00	438.81	264.02	18.066
					82.00	75.91	444.07	267.17	18.130
3.00	5.80	18.25	4.73	1.842	83.00	76.81	449.32	270.31	18.194
4.00	5.95	20.25	6.38	2.438	84.00	77.71	454.58	273.46	18.257
5.00	6.15	22.82	8.48	3.030	85.00	78.62	459.83	276.61	18.319
6.00	6.42	25.98	11.01	3.601	86.00	79.52	465.08	279.76	18.380
7.00	6.77	29.58	13.80	4.161	87.00	80.42	470.33	282.90	18.441
8.00	7.22	33.95	17.12	4.742	88.00	81.33	475.58	286.05	18.501
9.00	7.79	39.21	21.06	5.361	89.00	82.23	480.83	289.19	18.560
10.00	8.48	45.10	25.35	5.981	90.00	83.13	486.08	292.33	18.619
11.00	9.28	51.40	29.78	6.581	91.00	84.03	491.32	295.48	18.677
12.00	10.17	57.92	34.22	7.148	92.00	84.94	496.57	298.62	18.734
13.00	11.12	64.51	38.58	7.676	93.00	85.84	501.81	301.76	18.791
14.00	12.12	71.06	42.82	8.161	94.00	86.74	507.05	304.90	18.847
15.00	13.13	77.54	46.94	8.608	95.00	87.64	512.30	308.04	18.903
16.00	14.15	83.92	50.93	9.020	96.00	88.54	517.54	311.18	18.958
17.00	15.17	90.19	54.83	9.400	97.00	89.44	522.78	314.32	19.012
18.00	16.19	96.38	58.64	9.754	98.00	90.35	528.02	317.46	19.066
19.00	17.21	102.47	62.37	10.084	99.00	91.25	533.25	320.60	19.119
20.00	18.22	108.49	66.04	10.392	100.00	92.15	538.49	323.74	19.171
21.00	19.22	114.45	69.65	10.683	101.00	93.05	543.73	326.88	19.223
22.00	20.22	120.34	73.22	10.957	102.00	93.95	548.96	330.02	19.275
23.00	21.21	126.18	76.74	11.216	103.00	94.85	554.20	333.15	19.326
24.00	22.20	131.97	80.24	11.463	104.00	95.75	559.43	336.29	19.377
25.00	23.18	137.72	83.70	11.698	105.00	96.65	564.67	339.43	19.427
26.00	24.15	143.43	87.13	11.921	106.00	97.55	569.90	342.56	19.476
27.00	25.13	149.10	90.54	12.136	107.00	98.45	575.13	345.70	19.526
28.00	26.09	154.75	93.93	12.341	108.00	99.35	580.36	348.83	19.574
29.00	27.06	160.36	97.30	12.538	109.00	100.25	585.59	351.97	19.622
30.00	28.02	165.96	100.66	12.728	110.00	101.14	590.82	355.10	19.670
31.00	28.98	171.52	103.99	12.910	111.00	102.04	596.05	358.24	19.717
32.00	29.93	177.07	107.32	13.086	112.00	102.94	601.28	361.37	19.764
33.00	30.88	182.60	110.63	13.257	113.00	103.84	606.51	364.50	19.811
34.00	31.83	188.11	113.93	13.421	114.00	104.74	611.74	367.64	19.857
35.00	32.78	193.61	117.22	13.580	115.00	105.64	616.96	370.77	19.903
36.00	33.72	199.09	120.50	13.735	116.00	106.54	622.19	373.90	19.948
37.00	34.66	204.55	123.78	13.885	117.00	107.44	627.42	377.03	19.993
38.00	35.60	210.01	127.04	14.030	118.00	108.33	632.64	380.17	20.037
39.00	36.54	215.45	130.30	14.171	119.00	109.23	637.87	383.30	20.081
40.00	37.47	220.88	133.55	14.309	120.00	110.13	643.09	386.43	20.125
41.00	38.41	226.30	136.79	14.443	121.00	111.03	648.32	389.56	20.168
42.00	39.34	231.71	140.03	14.573	122.00	111.93	653.54	392.69	20.211
43.00	40.27	237.11	143.26	14.700	123.00	112.82	658.76	395.82	20.254
44.00	41.20	242.50	146.49	14.824	124.00	113.72	663.98	398.95	20.296
45.00	42.13	247.89	149.71	14.945	125.00	114.62	669.21	402.08	20.338
46.00	43.05	253.27	152.93	15.063	126.00	115.52	674.43	405.21	20.380
47.00	43.98	258.64	156.14	15.179	127.00	116.41	679.65	408.34	20.421
48.00	44.90	264.00	159.35	15.292	128.00	117.31	684.87	411.47	20.462
49.00	45.83	269.36	162.56	15.402	129.00	118.21	690.09	414.60	20.503
50.00	46.75	274.71	165.76	15.510	130.00	119.10	695.31	417.73	20.543
51.00	47.67	280.06	168.96	15.616	131.00	120.00	700.53	420.86	20.583
52.00	48.59	285.40	172.16	15.720	132.00	120.90	705.75	423.99	20.623
53.00	49.51	290.73	175.35	15.822	133.00	121.80	710.97	427.12	20.662
54.00	50.43	296.06	178.54	15.921	134.00	122.69	716.19	430.25	20.701
55.00	51.34	301.39	181.73	16.019	135.00	123.59	721.40	433.38	20.740
56.00	52.26	306.71	184.92	16.115	136.00	124.49	726.62	436.50	20.778
57.00	53.18	312.03	188.10	16.209	137.00	125.38	731.84	439.63	20.817
58.00	54.09	317.35	191.28	16.301	138.00	126.28	737.06	442.76	20.855
59.00	55.01	322.66	194.46	16.392	139.00	127.18	742.27	445.89	20.892
60.00	55.92	327.96	197.64	16.481	140.00	128.07	747.49	449.01	20.930

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	128.97	752.71	452.14	20.967	221.00	200.54	1169.33	701.97	23.307
142.00	129.86	757.92	455.27	21.004	222.00	201.43	1174.53	705.09	23.331
143.00	130.76	763.14	458.39	21.040	223.00	202.32	1179.73	708.21	23.354
144.00	131.66	768.35	461.52	21.077	224.00	203.22	1184.93	711.33	23.377
145.00	132.55	773.57	464.65	21.113	225.00	204.11	1190.13	714.45	23.401
146.00	133.45	778.78	467.77	21.148	226.00	205.00	1195.34	717.57	23.424
147.00	134.34	784.00	470.90	21.184	227.00	205.90	1200.54	720.69	23.447
148.00	135.24	789.21	474.03	21.219	228.00	206.79	1205.74	723.81	23.470
149.00	136.14	794.42	477.15	21.255	229.00	207.68	1210.94	726.93	23.492
150.00	137.03	799.64	480.28	21.289	230.00	208.58	1216.14	730.05	23.515
151.00	137.93	804.85	483.40	21.324	231.00	209.47	1221.35	733.17	23.538
152.00	138.82	810.06	486.53	21.358	232.00	210.36	1226.55	736.29	23.560
153.00	139.72	815.28	489.65	21.393	233.00	211.26	1231.75	739.41	23.582
154.00	140.61	820.49	492.78	21.427	234.00	212.15	1236.95	742.53	23.605
155.00	141.51	825.70	495.91	21.460	235.00	213.04	1242.15	745.65	23.627
156.00	142.41	830.91	499.03	21.494	236.00	213.94	1247.35	748.77	23.649
157.00	143.30	836.12	502.16	21.527	237.00	214.83	1252.55	751.89	23.671
158.00	144.20	841.34	505.28	21.560	238.00	215.72	1257.75	755.01	23.693
159.00	145.09	846.55	508.40	21.593	239.00	216.61	1262.96	758.13	23.715
160.00	145.99	851.76	511.53	21.626	240.00	217.51	1268.16	761.25	23.736
161.00	146.88	856.97	514.65	21.658	241.00	218.40	1273.36	764.37	23.758
162.00	147.78	862.18	517.78	21.691	242.00	219.29	1278.56	767.48	23.780
163.00	148.67	867.39	520.90	21.723	243.00	220.19	1283.76	770.60	23.801
164.00	149.57	872.60	524.03	21.754	244.00	221.08	1288.96	773.72	23.822
165.00	150.46	877.81	527.15	21.786	245.00	221.97	1294.16	776.84	23.844
166.00	151.36	883.02	530.27	21.818	246.00	222.87	1299.36	779.96	23.865
167.00	152.25	888.23	533.40	21.849	247.00	223.76	1304.56	783.08	23.886
168.00	153.15	893.44	536.52	21.880	248.00	224.65	1309.76	786.20	23.907
169.00	154.04	898.65	539.65	21.911	249.00	225.55	1314.96	789.32	23.928
170.00	154.94	903.86	542.77	21.942	250.00	226.44	1320.16	792.44	23.949
171.00	155.83	909.07	545.89	21.972	251.00	227.33	1325.36	795.56	23.969
172.00	156.73	914.27	549.02	22.003	252.00	228.22	1330.56	798.68	23.990
173.00	157.62	919.48	552.14	22.033	253.00	229.12	1335.76	801.80	24.011
174.00	158.52	924.69	555.26	22.063	254.00	230.01	1340.96	804.91	24.031
175.00	159.41	929.90	558.39	22.093	255.00	230.90	1346.16	808.03	24.052
176.00	160.31	935.11	561.51	22.122	256.00	231.80	1351.36	811.15	24.072
177.00	161.20	940.32	564.63	22.152	257.00	232.69	1356.56	814.27	24.092
178.00	162.10	945.52	567.75	22.181	258.00	233.58	1361.76	817.39	24.112
179.00	162.99	950.73	570.88	22.210	259.00	234.48	1366.96	820.51	24.133
180.00	163.88	955.94	574.00	22.239	260.00	235.37	1372.16	823.63	24.153
181.00	164.78	961.14	577.12	22.268	261.00	236.26	1377.36	826.75	24.173
182.00	165.67	966.35	580.24	22.297	262.00	237.15	1382.56	829.87	24.192
183.00	166.57	971.56	583.37	22.325	263.00	238.05	1387.76	832.98	24.212
184.00	167.46	976.77	586.49	22.354	264.00	238.94	1392.96	836.10	24.232
185.00	168.36	981.97	589.61	22.382	265.00	239.83	1398.16	839.22	24.252
186.00	169.25	987.18	592.73	22.410	266.00	240.73	1403.36	842.34	24.271
187.00	170.14	992.38	595.86	22.438	267.00	241.62	1408.56	845.46	24.291
188.00	171.04	997.59	598.98	22.466	268.00	242.51	1413.76	848.58	24.310
189.00	171.93	1002.80	602.10	22.493	269.00	243.40	1418.96	851.70	24.330
190.00	172.83	1008.00	605.22	22.521	270.00	244.30	1424.16	854.81	24.349
191.00	173.72	1013.21	608.34	22.548	271.00	245.19	1429.36	857.93	24.368
192.00	174.62	1018.41	611.47	22.575	272.00	246.08	1434.56	861.05	24.387
193.00	175.51	1023.62	614.59	22.602	273.00	246.98	1439.75	864.17	24.406
194.00	176.40	1028.82	617.71	22.629	274.00	247.87	1444.95	867.29	24.425
195.00	177.30	1034.03	620.83	22.656	275.00	248.76	1450.15	870.41	24.444
196.00	178.19	1039.23	623.95	22.683	276.00	249.65	1455.35	873.53	24.463
197.00	179.09	1044.44	627.07	22.709	277.00	250.55	1460.55	876.64	24.482
198.00	179.98	1049.64	630.19	22.735	278.00	251.44	1465.75	879.76	24.501
199.00	180.87	1054.85	633.32	22.762	279.00	252.33	1470.95	882.88	24.519
200.00	181.77	1060.05	636.44	22.788	280.00	253.22	1476.15	886.00	24.538
201.00	182.66	1065.26	639.56	22.814	281.00	254.12	1481.35	889.12	24.556
202.00	183.56	1070.46	642.68	22.840	282.00	255.01	1486.54	892.24	24.575
203.00	184.45	1075.67	645.80	22.865	283.00	255.90	1491.74	895.35	24.593
204.00	185.34	1080.87	648.92	22.891	284.00	256.79	1496.94	898.47	24.612
205.00	186.24	1086.07	652.04	22.916	285.00	257.69	1502.14	901.59	24.630
206.00	187.13	1091.28	655.16	22.942	286.00	258.58	1507.34	904.71	24.648
207.00	188.02	1096.48	658.28	22.967	287.00	259.47	1512.54	907.83	24.666
208.00	188.92	1101.69	661.40	22.992	288.00	260.37	1517.74	910.94	24.684
209.00	189.81	1106.89	664.53	23.017	289.00	261.26	1522.93	914.06	24.702
210.00	190.71	1112.09	667.65	23.042	290.00	262.15	1528.13	917.18	24.720
211.00	191.60	1117.30	670.77	23.066	291.00	263.04	1533.33	920.30	24.738
212.00	192.49	1122.50	673.89	23.091	292.00	263.94	1538.53	923.42	24.756
213.00	193.39	1127.70	677.01	23.116	293.00	264.83	1543.73	926.53	24.774
214.00	194.28	1132.91	680.13	23.140	294.00	265.72	1548.93	929.65	24.792
215.00	195.17	1138.11	683.25	23.164	295.00	266.61	1554.12	932.77	24.809
216.00	196.07	1143.31	686.37	23.188	296.00	267.51	1559.32	935.89	24.827
217.00	196.96	1148.52	689.49	23.212	297.00	268.40	1564.52	939.01	24.844
218.00	197.85	1153.72	692.61	23.236	298.00	269.29	1569.72	942.12	24.862
219.00	198.75	1158.92	695.73	23.260	299.00	270.18	1574.92	945.24	24.879
220.00	199.64	1164.12	698.85	23.284	300.00	271.08	1580.11	948.36	24.897

24.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.78	18.81	4.76	1.830
4.00	5.92	20.79	6.39	2.421
5.00	6.11	23.33	8.46	3.007
6.00	6.37	26.44	10.95	3.571
7.00	6.70	29.99	13.69	4.121
8.00	7.13	34.28	16.94	4.693
9.00	7.66	39.44	20.81	5.300
10.00	8.30	45.22	25.03	5.908
11.00	9.05	51.41	29.41	6.498
12.00	9.88	57.84	33.81	7.057
13.00	10.78	64.37	38.15	7.579
14.00	11.72	70.88	42.38	8.062
15.00	12.68	77.34	46.50	8.508
16.00	13.65	83.71	50.51	8.919
17.00	14.63	89.98	54.42	9.299
18.00	15.60	96.17	58.24	9.653
19.00	16.57	102.28	61.98	9.983
20.00	17.54	108.31	65.67	10.293
21.00	18.50	114.27	69.29	10.584
22.00	19.45	120.18	72.87	10.858
23.00	20.40	126.03	76.41	11.118
24.00	21.35	131.83	79.91	11.365
25.00	22.29	137.59	83.38	11.600
26.00	23.23	143.31	86.83	11.825
27.00	24.16	149.00	90.25	12.039
28.00	25.09	154.65	93.64	12.245
29.00	26.01	160.28	97.02	12.443
30.00	26.93	165.88	100.38	12.633
31.00	27.85	171.46	103.73	12.815
32.00	28.77	177.02	107.06	12.992
33.00	29.68	182.56	110.38	13.162
34.00	30.59	188.08	113.69	13.327
35.00	31.50	193.58	116.98	13.487
36.00	32.40	199.07	120.27	13.641
37.00	33.31	204.54	123.55	13.791
38.00	34.21	210.00	126.82	13.937
39.00	35.11	215.45	130.08	14.078
40.00	36.00	220.89	133.33	14.216
41.00	36.90	226.32	136.58	14.350
42.00	37.80	231.73	139.82	14.481
43.00	38.69	237.14	143.06	14.608
44.00	39.58	242.54	146.29	14.732
45.00	40.47	247.93	149.52	14.853
46.00	41.36	253.32	152.74	14.971
47.00	42.25	258.69	155.96	15.087
48.00	43.13	264.06	159.17	15.200
49.00	44.02	269.42	162.38	15.311
50.00	44.90	274.78	165.58	15.419
51.00	45.79	280.13	168.79	15.525
52.00	46.67	285.48	171.99	15.629
53.00	47.55	290.82	175.18	15.730
54.00	48.43	296.15	178.38	15.830
55.00	49.31	301.48	181.57	15.928
56.00	50.19	306.81	184.75	16.024
57.00	51.07	312.13	187.94	16.118
58.00	51.95	317.45	191.12	16.211
59.00	52.82	322.76	194.30	16.301
60.00	53.70	328.08	197.48	16.391
61.00	54.58	333.38	200.66	16.478
62.00	55.45	338.69	203.84	16.565
63.00	56.33	343.99	207.01	16.649
64.00	57.20	349.29	210.18	16.733
65.00	58.07	354.58	213.35	16.815
66.00	58.95	359.87	216.52	16.896
67.00	59.82	365.16	219.69	16.975
68.00	60.69	370.45	222.85	17.054
69.00	61.56	375.73	226.02	17.131
70.00	62.44	381.01	229.18	17.207
71.00	63.31	386.29	232.34	17.282
72.00	64.18	391.57	235.50	17.356
73.00	65.05	396.85	238.66	17.428
74.00	65.92	402.12	241.82	17.500
75.00	66.79	407.39	244.98	17.571
76.00	67.66	412.66	248.13	17.641
77.00	68.52	417.93	251.29	17.709
78.00	69.39	423.20	254.44	17.777
79.00	70.26	428.46	257.59	17.844
80.00	71.13	433.72	260.75	17.911
81.00	72.00	438.98	263.90	17.976
82.00	72.86	444.24	267.05	18.041
83.00	73.73	449.50	270.20	18.104
84.00	74.60	454.76	273.35	18.167
85.00	75.46	460.01	276.49	18.229
86.00	76.33	465.27	279.64	18.291
87.00	77.20	470.52	282.79	18.352
88.00	78.06	475.77	285.93	18.412
89.00	78.93	481.02	289.08	18.471
90.00	79.79	486.27	292.22	18.530
91.00	80.66	491.52	295.37	18.588
92.00	81.52	496.77	298.51	18.645
93.00	82.39	502.01	301.65	18.702
94.00	83.25	507.26	304.80	18.758
95.00	84.12	512.50	307.94	18.813
96.00	84.98	517.74	311.08	18.868
97.00	85.84	522.98	314.22	18.922
98.00	86.71	528.22	317.36	18.976
99.00	87.57	533.46	320.50	19.029
100.00	88.44	538.70	323.64	19.082
101.00	89.30	543.94	326.78	19.134
102.00	90.16	549.18	329.92	19.186
103.00	91.02	554.42	333.06	19.237
104.00	91.89	559.65	336.19	19.287
105.00	92.75	564.89	339.33	19.338
106.00	93.61	570.12	342.47	19.387
107.00	94.48	575.35	345.60	19.436
108.00	95.34	580.59	348.74	19.485
109.00	96.20	585.82	351.88	19.533
110.00	97.06	591.05	355.01	19.581
111.00	97.92	596.28	358.15	19.628
112.00	98.79	601.51	361.28	19.675
113.00	99.65	606.74	364.41	19.722
114.00	100.51	611.97	367.55	19.768
115.00	101.37	617.20	370.68	19.813
116.00	102.23	622.43	373.82	19.859
117.00	103.09	627.65	376.95	19.904
118.00	103.95	632.88	380.08	19.948
119.00	104.81	638.11	383.21	19.992
120.00	105.67	643.33	386.35	20.036
121.00	106.54	648.56	389.48	20.079
122.00	107.40	653.78	392.61	20.122
123.00	108.26	659.01	395.74	20.165
124.00	109.12	664.23	398.87	20.207
125.00	109.98	669.45	402.00	20.249
126.00	110.84	674.68	405.13	20.291
127.00	111.70	679.90	408.26	20.332
128.00	112.56	685.12	411.39	20.373
129.00	113.42	690.34	414.52	20.414
130.00	114.28	695.56	417.65	20.454
131.00	115.14	700.78	420.78	20.494
132.00	116.00	706.00	423.91	20.534
133.00	116.86	711.22	427.04	20.573
134.00	117.72	716.44	430.17	20.612
135.00	118.58	721.66	433.30	20.651
136.00	119.44	726.88	436.43	20.689
137.00	120.30	732.10	439.56	20.728
138.00	121.16	737.32	442.68	20.766
139.00	122.01	742.53	445.81	20.803
140.00	122.87	747.75	448.94	20.841

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	123.73	752.97	452.07	20.878	221.00	192.33	1169.64	701.92	23.219
142.00	124.59	758.19	455.20	20.915	222.00	193.18	1174.84	705.04	23.242
143.00	125.45	763.40	458.32	20.951	223.00	194.04	1180.04	708.16	23.266
144.00	126.31	768.62	461.45	20.988	224.00	194.90	1185.25	711.28	23.289
145.00	127.17	773.83	464.58	21.024	225.00	195.75	1190.45	714.40	23.312
146.00	128.03	779.05	467.70	21.060	226.00	196.61	1195.65	717.52	23.335
147.00	128.89	784.26	470.83	21.095	227.00	197.47	1200.85	720.64	23.358
148.00	129.75	789.48	473.96	21.131	228.00	198.32	1206.06	723.76	23.381
149.00	130.60	794.69	477.08	21.166	229.00	199.18	1211.26	726.88	23.404
150.00	131.46	799.91	480.21	21.201	230.00	200.03	1216.46	730.00	23.426
151.00	132.32	805.12	483.34	21.235	231.00	200.89	1221.66	733.12	23.449
152.00	133.18	810.34	486.46	21.270	232.00	201.75	1226.86	736.24	23.471
153.00	134.04	815.55	489.59	21.304	233.00	202.60	1232.07	739.36	23.494
154.00	134.90	820.76	492.71	21.338	234.00	203.46	1237.27	742.48	23.516
155.00	135.75	825.98	495.84	21.371	235.00	204.31	1242.47	745.60	23.538
156.00	136.61	831.19	498.96	21.405	236.00	205.17	1247.67	748.72	23.560
157.00	137.47	836.40	502.09	21.438	237.00	206.03	1252.87	751.84	23.582
158.00	138.33	841.61	505.21	21.471	238.00	206.88	1258.07	754.96	23.604
159.00	139.19	846.82	508.34	21.504	239.00	207.74	1263.27	758.08	23.626
160.00	140.05	852.04	511.46	21.537	240.00	208.59	1268.48	761.20	23.648
161.00	140.90	857.25	514.59	21.569	241.00	209.45	1273.68	764.32	23.669
162.00	141.76	862.46	517.71	21.602	242.00	210.31	1278.88	767.44	23.691
163.00	142.62	867.67	520.84	21.634	243.00	211.16	1284.08	770.56	23.712
164.00	143.48	872.88	523.96	21.666	244.00	212.02	1289.28	773.68	23.734
165.00	144.34	878.09	527.09	21.697	245.00	212.87	1294.48	776.80	23.755
166.00	145.19	883.30	530.21	21.729	246.00	213.73	1299.68	779.92	23.776
167.00	146.05	888.51	533.34	21.760	247.00	214.59	1304.88	783.04	23.797
168.00	146.91	893.72	536.46	21.791	248.00	215.44	1310.08	786.16	23.818
169.00	147.77	898.93	539.58	21.822	249.00	216.30	1315.28	789.28	23.839
170.00	148.62	904.14	542.71	21.853	250.00	217.15	1320.49	792.40	23.860
171.00	149.48	909.35	545.83	21.883	251.00	218.01	1325.69	795.51	23.881
172.00	150.34	914.56	548.96	21.914	252.00	218.87	1330.89	798.63	23.902
173.00	151.20	919.77	552.08	21.944	253.00	219.72	1336.09	801.75	23.922
174.00	152.06	924.98	555.20	21.974	254.00	220.58	1341.29	804.87	23.943
175.00	152.91	930.19	558.33	22.004	255.00	221.43	1346.49	807.99	23.963
176.00	153.77	935.40	561.45	22.034	256.00	222.29	1351.69	811.11	23.983
177.00	154.63	940.61	564.57	22.063	257.00	223.15	1356.89	814.23	24.004
178.00	155.48	945.81	567.70	22.092	258.00	224.00	1362.09	817.35	24.024
179.00	156.34	951.02	570.82	22.122	259.00	224.86	1367.29	820.47	24.044
180.00	157.20	956.23	573.94	22.151	260.00	225.71	1372.49	823.59	24.064
181.00	158.06	961.44	577.06	22.179	261.00	226.57	1377.69	826.71	24.084
182.00	158.91	966.64	580.19	22.208	262.00	227.42	1382.89	829.82	24.104
183.00	159.77	971.85	583.31	22.237	263.00	228.28	1388.09	832.94	24.124
184.00	160.63	977.06	586.43	22.265	264.00	229.14	1393.29	836.06	24.143
185.00	161.49	982.27	589.55	22.293	265.00	229.99	1398.49	839.18	24.163
186.00	162.34	987.47	592.68	22.321	266.00	230.85	1403.69	842.30	24.183
187.00	163.20	992.68	595.80	22.349	267.00	231.70	1408.89	845.42	24.202
188.00	164.06	997.89	598.92	22.377	268.00	232.56	1414.09	848.54	24.222
189.00	164.91	1003.09	602.04	22.405	269.00	233.41	1419.29	851.66	24.241
190.00	165.77	1008.30	605.17	22.432	270.00	234.27	1424.49	854.77	24.260
191.00	166.63	1013.51	608.29	22.459	271.00	235.13	1429.69	857.89	24.279
192.00	167.49	1018.71	611.41	22.487	272.00	235.98	1434.89	861.01	24.299
193.00	168.34	1023.92	614.53	22.514	273.00	236.84	1440.08	864.13	24.318
194.00	169.20	1029.12	617.65	22.541	274.00	237.69	1445.28	867.25	24.337
195.00	170.06	1034.33	620.78	22.567	275.00	238.55	1450.48	870.37	24.356
196.00	170.91	1039.54	623.90	22.594	276.00	239.40	1455.68	873.49	24.375
197.00	171.77	1044.74	627.02	22.620	277.00	240.26	1460.88	876.60	24.393
198.00	172.63	1049.95	630.14	22.647	278.00	241.11	1466.08	879.72	24.412
199.00	173.48	1055.15	633.26	22.673	279.00	241.97	1471.28	882.84	24.431
200.00	174.34	1060.36	636.38	22.699	280.00	242.83	1476.48	885.96	24.449
201.00	175.20	1065.56	639.51	22.725	281.00	243.68	1481.68	889.08	24.468
202.00	176.05	1070.77	642.63	22.751	282.00	244.54	1486.88	892.20	24.486
203.00	176.91	1075.97	645.75	22.777	283.00	245.39	1492.08	895.32	24.505
204.00	177.77	1081.18	648.87	22.802	284.00	246.25	1497.27	898.43	24.523
205.00	178.62	1086.38	651.99	22.828	285.00	247.10	1502.47	901.55	24.541
206.00	179.48	1091.58	655.11	22.853	286.00	247.96	1507.67	904.67	24.560
207.00	180.34	1096.79	658.23	22.878	287.00	248.81	1512.87	907.79	24.578
208.00	181.19	1101.99	661.35	22.903	288.00	249.67	1518.07	910.91	24.596
209.00	182.05	1107.20	664.47	22.928	289.00	250.52	1523.27	914.02	24.614
210.00	182.91	1112.40	667.60	22.953	290.00	251.38	1528.47	917.14	24.632
211.00	183.76	1117.60	670.72	22.978	291.00	252.24	1533.66	920.26	24.650
212.00	184.62	1122.81	673.84	23.002	292.00	253.09	1538.86	923.38	24.668
213.00	185.48	1128.01	676.96	23.027	293.00	253.95	1544.06	926.50	24.685
214.00	186.33	1133.22	680.08	23.051	294.00	254.80	1549.26	929.62	24.703
215.00	187.19	1138.42	683.20	23.076	295.00	255.66	1554.46	932.73	24.721
216.00	188.05	1143.62	686.32	23.100	296.00	256.51	1559.66	935.85	24.738
217.00	188.90	1148.83	689.44	23.124	297.00	257.37	1564.86	938.97	24.756
218.00	189.76	1154.03	692.56	23.148	298.00	258.22	1570.05	942.09	24.773
219.00	190.61	1159.23	695.68	23.171	299.00	259.08	1575.25	945.21	24.791
220.00	191.47	1164.43	698.80	23.195	300.00	259.93	1580.45	948.32	24.808

25.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.75	19.35	4.79	1.817
4.00	5.89	21.32	6.41	2.405
5.00	6.08	23.84	8.45	2.985
6.00	6.32	26.91	10.90	3.542
7.00	6.64	30.41	13.58	4.084
8.00	7.05	34.63	16.78	4.646
9.00	7.55	39.70	20.58	5.242
10.00	8.15	45.37	24.74	5.840
11.00	8.84	51.46	29.06	6.420
12.00	9.63	57.81	33.42	6.972
13.00	10.47	64.26	37.74	7.489
14.00	11.36	70.74	41.97	7.968
15.00	12.27	77.17	46.09	8.412
16.00	13.19	83.52	50.10	8.822
17.00	14.12	89.80	54.02	9.203
18.00	15.06	95.99	57.85	9.557
19.00	15.99	102.10	61.61	9.887
20.00	16.91	108.14	65.30	10.197
21.00	17.83	114.12	68.94	10.488
22.00	18.75	120.03	72.53	10.764
23.00	19.66	125.89	76.08	11.024
24.00	20.57	131.71	79.59	11.272
25.00	21.48	137.48	83.07	11.507
26.00	22.38	143.21	86.53	11.732
27.00	23.27	148.91	89.95	11.947
28.00	24.16	154.57	93.36	12.153
29.00	25.05	160.21	96.75	12.351
30.00	25.94	165.82	100.11	12.541
31.00	26.82	171.41	103.47	12.724
32.00	27.70	176.98	106.80	12.901
33.00	28.58	182.52	110.13	13.072
34.00	29.45	188.05	113.44	13.237
35.00	30.32	193.56	116.74	13.397
36.00	31.19	199.06	120.04	13.551
37.00	32.06	204.54	123.32	13.702
38.00	32.93	210.01	126.59	13.847
39.00	33.79	215.46	129.86	13.989
40.00	34.66	220.91	133.12	14.127
41.00	35.52	226.34	136.37	14.261
42.00	36.38	231.76	139.62	14.392
43.00	37.23	237.18	142.86	14.519
44.00	38.09	242.58	146.09	14.643
45.00	38.95	247.98	149.32	14.765
46.00	39.80	253.37	152.55	14.883
47.00	40.65	258.75	155.77	14.999
48.00	41.50	264.12	158.98	15.112
49.00	42.36	269.49	162.20	15.223
50.00	43.21	274.85	165.41	15.331
51.00	44.05	280.21	168.61	15.437
52.00	44.90	285.56	171.81	15.541
53.00	45.75	290.90	175.01	15.643
54.00	46.60	296.24	178.21	15.743
55.00	47.44	301.58	181.40	15.841
56.00	48.29	306.91	184.59	15.937
57.00	49.13	312.24	187.78	16.031
58.00	49.97	317.56	190.97	16.123
59.00	50.82	322.88	194.15	16.214
60.00	51.66	328.19	197.33	16.304
61.00	52.50	333.50	200.51	16.391
62.00	53.34	338.81	203.69	16.478
63.00	54.18	344.11	206.86	16.563
64.00	55.02	349.41	210.04	16.646
65.00	55.86	354.71	213.21	16.728
66.00	56.70	360.01	216.38	16.809
67.00	57.54	365.30	219.55	16.889
68.00	58.38	370.59	222.71	16.967
69.00	59.21	375.88	225.88	17.044
70.00	60.05	381.16	229.05	17.120
71.00	60.89	386.45	232.21	17.195
72.00	61.72	391.73	235.37	17.269
73.00	62.56	397.00	238.53	17.342
74.00	63.39	402.28	241.69	17.414
75.00	64.23	407.55	244.85	17.484
76.00	65.06	412.83	248.01	17.554
77.00	65.90	418.10	251.16	17.623
78.00	66.73	423.37	254.32	17.691
79.00	67.57	428.63	257.47	17.758
80.00	68.40	433.90	260.63	17.824
81.00	69.23	439.16	263.78	17.890
82.00	70.07	444.42	266.93	17.954
83.00	70.90	449.68	270.08	18.018
84.00	71.73	454.94	273.23	18.081
85.00	72.56	460.20	276.38	18.143
86.00	73.40	465.45	279.53	18.205
87.00	74.23	470.71	282.68	18.266
88.00	75.06	475.96	285.82	18.326
89.00	75.89	481.22	288.97	18.385
90.00	76.72	486.47	292.12	18.444
91.00	77.55	491.72	295.26	18.502
92.00	78.38	496.96	298.41	18.559
93.00	79.21	502.21	301.55	18.616
94.00	80.04	507.46	304.69	18.672
95.00	80.87	512.70	307.84	18.727
96.00	81.70	517.95	310.98	18.782
97.00	82.53	523.19	314.12	18.837
98.00	83.36	528.43	317.26	18.890
99.00	84.19	533.68	320.40	18.944
100.00	85.02	538.92	323.54	18.996
101.00	85.85	544.16	326.68	19.048
102.00	86.68	549.40	329.82	19.100
103.00	87.51	554.63	332.96	19.151
104.00	88.34	559.87	336.10	19.202
105.00	89.16	565.11	339.24	19.252
106.00	89.99	570.34	342.37	19.302
107.00	90.82	575.58	345.51	19.351
108.00	91.65	580.81	348.65	19.399
109.00	92.48	586.05	351.78	19.448
110.00	93.31	591.28	354.92	19.495
111.00	94.13	596.51	358.06	19.543
112.00	94.96	601.74	361.19	19.590
113.00	95.79	606.97	364.33	19.636
114.00	96.61	612.20	367.46	19.682
115.00	97.44	617.43	370.59	19.728
116.00	98.27	622.66	373.73	19.773
117.00	99.10	627.89	376.86	19.818
118.00	99.92	633.12	380.00	19.863
119.00	100.75	638.35	383.13	19.907
120.00	101.58	643.57	386.26	19.950
121.00	102.40	648.80	389.39	19.994
122.00	103.23	654.03	392.53	20.037
123.00	104.06	659.25	395.66	20.079
124.00	104.88	664.48	398.79	20.122
125.00	105.71	669.70	401.92	20.164
126.00	106.53	674.92	405.05	20.205
127.00	107.36	680.15	408.18	20.247
128.00	108.19	685.37	411.31	20.288
129.00	109.01	690.59	414.45	20.328
130.00	109.84	695.82	417.58	20.369
131.00	110.66	701.04	420.71	20.409
132.00	111.49	706.26	423.84	20.448
133.00	112.31	711.48	426.96	20.488
134.00	113.14	716.70	430.09	20.527
135.00	113.97	721.92	433.22	20.566
136.00	114.79	727.14	436.35	20.604
137.00	115.62	732.36	439.48	20.642
138.00	116.44	737.58	442.61	20.680
139.00	117.27	742.80	445.74	20.718
140.00	118.09	748.01	448.87	20.755

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	118.92	753.23	452.00	20.793	221.00	184.78	1169.95	701.87	23.134
142.00	119.74	758.45	455.12	20.829	222.00	185.60	1175.15	705.00	23.157
143.00	120.57	763.67	458.25	20.866	223.00	186.42	1180.36	708.12	23.181
144.00	121.39	768.88	461.38	20.902	224.00	187.24	1185.56	711.24	23.204
145.00	122.22	774.10	464.51	20.938	225.00	188.07	1190.76	714.36	23.227
146.00	123.04	779.32	467.63	20.974	226.00	188.89	1195.96	717.48	23.250
147.00	123.86	784.53	470.76	21.010	227.00	189.71	1201.17	720.60	23.273
148.00	124.69	789.75	473.89	21.045	228.00	190.53	1206.37	723.72	23.296
149.00	125.51	794.96	477.01	21.080	229.00	191.35	1211.57	726.84	23.319
150.00	126.34	800.18	480.14	21.115	230.00	192.18	1216.77	729.96	23.341
151.00	127.16	805.39	483.27	21.150	231.00	193.00	1221.98	733.08	23.364
152.00	127.99	810.61	486.39	21.184	232.00	193.82	1227.18	736.20	23.386
153.00	128.81	815.82	489.52	21.219	233.00	194.64	1232.38	739.32	23.409
154.00	129.64	821.04	492.65	21.253	234.00	195.46	1237.58	742.44	23.431
155.00	130.46	826.25	495.77	21.286	235.00	196.29	1242.79	745.56	23.453
156.00	131.28	831.46	498.90	21.320	236.00	197.11	1247.99	748.68	23.475
157.00	132.11	836.68	502.02	21.353	237.00	197.93	1253.19	751.80	23.497
158.00	132.93	841.89	505.15	21.386	238.00	198.75	1258.39	754.92	23.519
159.00	133.76	847.10	508.27	21.419	239.00	199.57	1263.59	758.04	23.541
160.00	134.58	852.32	511.40	21.452	240.00	200.39	1268.80	761.16	23.563
161.00	135.40	857.53	514.52	21.484	241.00	201.22	1274.00	764.28	23.584
162.00	136.23	862.74	517.65	21.517	242.00	202.04	1279.20	767.40	23.606
163.00	137.05	867.95	520.77	21.549	243.00	202.86	1284.40	770.52	23.627
164.00	137.87	873.16	523.90	21.580	244.00	203.68	1289.60	773.64	23.649
165.00	138.70	878.37	527.02	21.612	245.00	204.50	1294.80	776.76	23.670
166.00	139.52	883.59	530.15	21.644	246.00	205.33	1300.00	779.87	23.691
167.00	140.35	888.80	533.27	21.675	247.00	206.15	1305.21	782.99	23.712
168.00	141.17	894.01	536.40	21.706	248.00	206.97	1310.41	786.11	23.733
169.00	141.99	899.22	539.52	21.737	249.00	207.79	1315.61	789.23	23.754
170.00	142.82	904.43	542.65	21.768	250.00	208.61	1320.81	792.35	23.775
171.00	143.64	909.64	545.77	21.798	251.00	209.43	1326.01	795.47	23.796
172.00	144.46	914.85	548.89	21.829	252.00	210.26	1331.21	798.59	23.817
173.00	145.29	920.06	552.02	21.859	253.00	211.08	1336.41	801.71	23.837
174.00	146.11	925.27	555.14	21.889	254.00	211.90	1341.61	804.83	23.858
175.00	146.93	930.48	558.27	21.919	255.00	212.72	1346.81	807.95	23.878
176.00	147.76	935.69	561.39	21.948	256.00	213.54	1352.01	811.07	23.898
177.00	148.58	940.90	564.51	21.978	257.00	214.36	1357.21	814.19	23.919
178.00	149.40	946.10	567.64	22.007	258.00	215.19	1362.41	817.31	23.939
179.00	150.23	951.31	570.76	22.036	259.00	216.01	1367.61	820.43	23.959
180.00	151.05	956.52	573.88	22.065	260.00	216.83	1372.81	823.55	23.979
181.00	151.87	961.73	577.01	22.094	261.00	217.65	1378.01	826.66	23.999
182.00	152.70	966.94	580.13	22.123	262.00	218.47	1383.22	829.78	24.019
183.00	153.52	972.15	583.25	22.152	263.00	219.29	1388.42	832.90	24.039
184.00	154.34	977.35	586.38	22.180	264.00	220.12	1393.62	836.02	24.058
185.00	155.17	982.56	589.50	22.208	265.00	220.94	1398.82	839.14	24.078
186.00	155.99	987.77	592.62	22.236	266.00	221.76	1404.02	842.26	24.098
187.00	156.81	992.98	595.74	22.264	267.00	222.58	1409.22	845.38	24.117
188.00	157.63	998.18	598.87	22.292	268.00	223.40	1414.42	848.50	24.137
189.00	158.46	1003.39	601.99	22.320	269.00	224.22	1419.62	851.62	24.156
190.00	159.28	1008.60	605.11	22.347	270.00	225.04	1424.81	854.73	24.175
191.00	160.10	1013.80	608.23	22.374	271.00	225.87	1430.01	857.85	24.195
192.00	160.93	1019.01	611.36	22.402	272.00	226.69	1435.21	860.97	24.214
193.00	161.75	1024.22	614.48	22.429	273.00	227.51	1440.41	864.09	24.233
194.00	162.57	1029.42	617.60	22.456	274.00	228.33	1445.61	867.21	24.252
195.00	163.39	1034.63	620.72	22.482	275.00	229.15	1450.81	870.33	24.271
196.00	164.22	1039.84	623.84	22.509	276.00	229.97	1456.01	873.45	24.290
197.00	165.04	1045.04	626.97	22.535	277.00	230.79	1461.21	876.57	24.308
198.00	165.86	1050.25	630.09	22.562	278.00	231.62	1466.41	879.68	24.327
199.00	166.68	1055.45	633.21	22.588	279.00	232.44	1471.61	882.80	24.346
200.00	167.51	1060.66	636.33	22.614	280.00	233.26	1476.81	885.92	24.364
201.00	168.33	1065.86	639.45	22.640	281.00	234.08	1482.01	889.04	24.383
202.00	169.15	1071.07	642.57	22.666	282.00	234.90	1487.21	892.16	24.401
203.00	169.97	1076.27	645.70	22.692	283.00	235.72	1492.41	895.28	24.420
204.00	170.80	1081.48	648.82	22.717	284.00	236.54	1497.61	898.40	24.438
205.00	171.62	1086.68	651.94	22.743	285.00	237.37	1502.81	901.51	24.456
206.00	172.44	1091.89	655.06	22.768	286.00	238.19	1508.00	904.63	24.475
207.00	173.26	1097.09	658.18	22.793	287.00	239.01	1513.20	907.75	24.493
208.00	174.09	1102.30	661.30	22.818	288.00	239.83	1518.40	910.87	24.511
209.00	174.91	1107.50	664.42	22.843	289.00	240.65	1523.60	913.99	24.529
210.00	175.73	1112.71	667.55	22.868	290.00	241.47	1528.80	917.11	24.547
211.00	176.55	1117.91	670.67	22.893	291.00	242.29	1534.00	920.22	24.565
212.00	177.38	1123.12	673.79	22.917	292.00	243.11	1539.20	923.34	24.583
213.00	178.20	1128.32	676.91	22.942	293.00	243.94	1544.40	926.46	24.600
214.00	179.02	1133.52	680.03	22.966	294.00	244.76	1549.60	929.58	24.618
215.00	179.84	1138.73	683.15	22.990	295.00	245.58	1554.79	932.70	24.636
216.00	180.67	1143.93	686.27	23.015	296.00	246.40	1559.99	935.82	24.653
217.00	181.49	1149.14	689.39	23.039	297.00	247.22	1565.19	938.93	24.671
218.00	182.31	1154.34	692.51	23.063	298.00	248.04	1570.39	942.05	24.688
219.00	183.13	1159.54	695.63	23.086	299.00	248.86	1575.59	945.17	24.706
220.00	183.95	1164.75	698.75	23.110	300.00	249.68	1580.79	948.29	24.723

26.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.72	19.90	4.82	1.805
4.00	5.86	21.85	6.42	2.389
5.00	6.04	24.34	8.43	2.964
6.00	6.28	27.38	10.85	3.514
7.00	6.58	30.83	13.49	4.048
8.00	6.97	34.98	16.63	4.601
9.00	7.44	39.97	20.37	5.188
10.00	8.00	45.55	24.47	5.776
11.00	8.66	51.55	28.74	6.347
12.00	9.39	57.81	33.06	6.892
13.00	10.19	64.20	37.36	7.403
14.00	11.03	70.63	41.57	7.879
15.00	11.89	77.03	45.69	8.321
16.00	12.78	83.37	49.71	8.730
17.00	13.67	89.64	53.63	9.110
18.00	14.56	95.83	57.48	9.464
19.00	15.45	101.94	61.24	9.795
20.00	16.34	107.99	64.95	10.105
21.00	17.22	113.97	68.60	10.397
22.00	18.11	119.90	72.20	10.673
23.00	18.98	125.77	75.76	10.934
24.00	19.86	131.59	79.28	11.182
25.00	20.73	137.37	82.77	11.418
26.00	21.59	143.12	86.23	11.643
27.00	22.45	148.82	89.67	11.858
28.00	23.31	154.50	93.08	12.065
29.00	24.17	160.15	96.47	12.263
30.00	25.02	165.77	99.85	12.453
31.00	25.87	171.36	103.21	12.637
32.00	26.72	176.94	106.55	12.814
33.00	27.56	182.49	109.88	12.985
34.00	28.40	188.03	113.20	13.150
35.00	29.24	193.55	116.51	13.310
36.00	30.08	199.05	119.81	13.465
37.00	30.92	204.54	123.09	13.615
38.00	31.75	210.02	126.37	13.761
39.00	32.58	215.48	129.64	13.903
40.00	33.41	220.93	132.91	14.041
41.00	34.24	226.37	136.16	14.176
42.00	35.07	231.80	139.41	14.306
43.00	35.89	237.22	142.66	14.434
44.00	36.72	242.63	145.90	14.558
45.00	37.54	248.03	149.13	14.680
46.00	38.36	253.42	152.36	14.798
47.00	39.18	258.81	155.58	14.914
48.00	40.00	264.19	158.80	15.027
49.00	40.82	269.56	162.02	15.138
50.00	41.64	274.93	165.23	15.247
51.00	42.46	280.29	168.44	15.353
52.00	43.27	285.64	171.64	15.457
53.00	44.09	290.99	174.84	15.559
54.00	44.90	296.34	178.04	15.659
55.00	45.72	301.68	181.24	15.757
56.00	46.53	307.01	184.43	15.853
57.00	47.34	312.34	187.62	15.947
58.00	48.15	317.67	190.81	16.040
59.00	48.96	322.99	193.99	16.131
60.00	49.77	328.31	197.18	16.220
61.00	50.58	333.62	200.36	16.308
62.00	51.39	338.93	203.54	16.394
63.00	52.20	344.24	206.72	16.479
64.00	53.01	349.55	209.89	16.563
65.00	53.82	354.85	213.07	16.645
66.00	54.62	360.15	216.24	16.726
67.00	55.43	365.44	219.41	16.805
68.00	56.24	370.73	222.58	16.884
69.00	57.04	376.03	225.75	16.961
70.00	57.85	381.31	228.91	17.037
71.00	58.65	386.60	232.08	17.112
72.00	59.46	391.88	235.24	17.186
73.00	60.26	397.16	238.40	17.259
74.00	61.07	402.44	241.56	17.331
75.00	61.87	407.72	244.72	17.401
76.00	62.67	412.99	247.88	17.471
77.00	63.47	418.27	251.04	17.540
78.00	64.28	423.54	254.20	17.608
79.00	65.08	428.81	257.35	17.675
80.00	65.88	434.07	260.51	17.742
81.00	66.68	439.34	263.66	17.807
82.00	67.48	444.60	266.81	17.872
83.00	68.29	449.86	269.97	17.935
84.00	69.09	455.13	273.12	17.998
85.00	69.89	460.39	276.27	18.061
86.00	70.69	465.64	279.42	18.122
87.00	71.49	470.90	282.57	18.183
88.00	72.29	476.16	285.71	18.243
89.00	73.09	481.41	288.86	18.302
90.00	73.89	486.66	292.01	18.361
91.00	74.69	491.91	295.15	18.419
92.00	75.48	497.17	298.30	18.477
93.00	76.28	502.41	301.44	18.533
94.00	77.08	507.66	304.59	18.589
95.00	77.88	512.91	307.73	18.645
96.00	78.68	518.16	310.88	18.700
97.00	79.48	523.40	314.02	18.754
98.00	80.27	528.65	317.16	18.808
99.00	81.07	533.89	320.30	18.861
100.00	81.87	539.13	323.44	18.914
101.00	82.67	544.37	326.58	18.966
102.00	83.46	549.61	329.72	19.018
103.00	84.26	554.85	332.86	19.069
104.00	85.06	560.09	336.00	19.119
105.00	85.86	565.33	339.14	19.170
106.00	86.65	570.57	342.28	19.219
107.00	87.45	575.80	345.42	19.268
108.00	88.25	581.04	348.56	19.317
109.00	89.04	586.27	351.69	19.365
110.00	89.84	591.51	354.83	19.413
111.00	90.63	596.74	357.97	19.460
112.00	91.43	601.97	361.10	19.507
113.00	92.23	607.21	364.24	19.554
114.00	93.02	612.44	367.37	19.600
115.00	93.82	617.67	370.51	19.646
116.00	94.61	622.90	373.64	19.691
117.00	95.41	628.13	376.78	19.736
118.00	96.20	633.36	379.91	19.780
119.00	97.00	638.59	383.04	19.825
120.00	97.79	643.82	386.18	19.868
121.00	98.59	649.04	389.31	19.912
122.00	99.38	654.27	392.44	19.955
123.00	100.18	659.50	395.58	19.997
124.00	100.97	664.72	398.71	20.040
125.00	101.77	669.95	401.84	20.082
126.00	102.56	675.17	404.97	20.123
127.00	103.36	680.40	408.10	20.165
128.00	104.15	685.62	411.24	20.206
129.00	104.94	690.85	414.37	20.246
130.00	105.74	696.07	417.50	20.287
131.00	106.53	701.29	420.63	20.327
132.00	107.33	706.51	423.76	20.366
133.00	108.12	711.74	426.89	20.406
134.00	108.91	716.96	430.02	20.445
135.00	109.71	722.18	433.15	20.484
136.00	110.50	727.40	436.28	20.522
137.00	111.30	732.62	439.41	20.560
138.00	112.09	737.84	442.54	20.598
139.00	112.88	743.06	445.67	20.636
140.00	113.68	748.28	448.79	20.673

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	114.47	753.50	451.92	20.711	221.00	177.81	1170.26	701.83	23.052
142.00	115.26	758.71	455.05	20.747	222.00	178.60	1175.47	704.95	23.076
143.00	116.06	763.93	458.18	20.784	223.00	179.39	1180.67	708.07	23.099
144.00	116.85	769.15	461.31	20.820	224.00	180.18	1185.87	711.19	23.122
145.00	117.64	774.37	464.44	20.857	225.00	180.97	1191.08	714.31	23.145
146.00	118.44	779.58	467.56	20.892	226.00	181.76	1196.28	717.43	23.168
147.00	119.23	784.80	470.69	20.928	227.00	182.55	1201.48	720.55	23.191
148.00	120.02	790.02	473.82	20.963	228.00	183.34	1206.68	723.67	23.214
149.00	120.81	795.23	476.95	20.998	229.00	184.13	1211.89	726.79	23.237
150.00	121.61	800.45	480.07	21.033	230.00	184.92	1217.09	729.91	23.260
151.00	122.40	805.67	483.20	21.068	231.00	185.71	1222.29	733.03	23.282
152.00	123.19	810.88	486.33	21.102	232.00	186.50	1227.50	736.15	23.305
153.00	123.99	816.10	489.45	21.137	233.00	187.29	1232.70	739.27	23.327
154.00	124.78	821.31	492.58	21.171	234.00	188.08	1237.90	742.39	23.349
155.00	125.57	826.53	495.71	21.204	235.00	188.87	1243.10	745.51	23.372
156.00	126.36	831.74	498.83	21.238	236.00	189.66	1248.31	748.63	23.394
157.00	127.16	836.95	501.96	21.271	237.00	190.45	1253.51	751.75	23.416
158.00	127.95	842.17	505.08	21.304	238.00	191.24	1258.71	754.87	23.438
159.00	128.74	847.38	508.21	21.337	239.00	192.03	1263.91	757.99	23.459
160.00	129.53	852.59	511.34	21.370	240.00	192.83	1269.11	761.11	23.481
161.00	130.33	857.81	514.46	21.402	241.00	193.62	1274.32	764.23	23.503
162.00	131.12	863.02	517.59	21.435	242.00	194.41	1279.52	767.35	23.524
163.00	131.91	868.23	520.71	21.467	243.00	195.20	1284.72	770.47	23.546
164.00	132.70	873.45	523.84	21.499	244.00	195.99	1289.92	773.59	23.567
165.00	133.50	878.66	526.96	21.530	245.00	196.78	1295.12	776.71	23.588
166.00	134.29	883.87	530.09	21.562	246.00	197.57	1300.33	779.83	23.610
167.00	135.08	889.08	533.21	21.593	247.00	198.36	1305.53	782.95	23.631
168.00	135.87	894.29	536.34	21.624	248.00	199.15	1310.73	786.07	23.652
169.00	136.66	899.50	539.46	21.655	249.00	199.94	1315.93	789.19	23.673
170.00	137.46	904.71	542.59	21.686	250.00	200.73	1321.13	792.31	23.693
171.00	138.25	909.92	545.71	21.716	251.00	201.52	1326.33	795.43	23.714
172.00	139.04	915.14	548.83	21.747	252.00	202.31	1331.53	798.55	23.735
173.00	139.83	920.35	551.96	21.777	253.00	203.10	1336.73	801.67	23.756
174.00	140.62	925.56	555.08	21.807	254.00	203.89	1341.94	804.79	23.776
175.00	141.41	930.77	558.21	21.837	255.00	204.68	1347.14	807.91	23.796
176.00	142.21	935.98	561.33	21.867	256.00	205.47	1352.34	811.03	23.817
177.00	143.00	941.19	564.45	21.896	257.00	206.26	1357.54	814.15	23.837
178.00	143.79	946.39	567.58	21.925	258.00	207.05	1362.74	817.27	23.857
179.00	144.58	951.60	570.70	21.955	259.00	207.84	1367.94	820.38	23.877
180.00	145.37	956.81	573.82	21.984	260.00	208.63	1373.14	823.50	23.897
181.00	146.16	962.02	576.95	22.013	261.00	209.42	1378.34	826.62	23.917
182.00	146.96	967.23	580.07	22.041	262.00	210.21	1383.54	829.74	23.937
183.00	147.75	972.44	583.20	22.070	263.00	211.00	1388.74	832.86	23.957
184.00	148.54	977.65	586.32	22.098	264.00	211.79	1393.94	835.98	23.977
185.00	149.33	982.86	589.44	22.126	265.00	212.58	1399.14	839.10	23.997
186.00	150.12	988.06	592.56	22.154	266.00	213.37	1404.34	842.22	24.016
187.00	150.91	993.27	595.69	22.182	267.00	214.16	1409.54	845.34	24.036
188.00	151.70	998.48	598.81	22.210	268.00	214.95	1414.74	848.46	24.055
189.00	152.50	1003.69	601.93	22.238	269.00	215.74	1419.94	851.58	24.074
190.00	153.29	1008.90	605.06	22.265	270.00	216.53	1425.14	854.69	24.094
191.00	154.08	1014.10	608.18	22.293	271.00	217.32	1430.34	857.81	24.113
192.00	154.87	1019.31	611.30	22.320	272.00	218.11	1435.54	860.93	24.132
193.00	155.66	1024.52	614.42	22.347	273.00	218.90	1440.74	864.05	24.151
194.00	156.45	1029.72	617.55	22.374	274.00	219.69	1445.94	867.17	24.170
195.00	157.24	1034.93	620.67	22.401	275.00	220.48	1451.14	870.29	24.189
196.00	158.03	1040.14	623.79	22.427	276.00	221.27	1456.34	873.41	24.208
197.00	158.83	1045.34	626.91	22.454	277.00	222.06	1461.54	876.53	24.227
198.00	159.62	1050.55	630.03	22.480	278.00	222.85	1466.74	879.65	24.246
199.00	160.41	1055.76	633.16	22.506	279.00	223.64	1471.94	882.76	24.264
200.00	161.20	1060.96	636.28	22.532	280.00	224.43	1477.14	885.88	24.283
201.00	161.99	1066.17	639.40	22.558	281.00	225.22	1482.34	889.00	24.301
202.00	162.78	1071.37	642.52	22.584	282.00	226.01	1487.54	892.12	24.320
203.00	163.57	1076.58	645.64	22.610	283.00	226.80	1492.74	895.24	24.338
204.00	164.36	1081.78	648.77	22.635	284.00	227.59	1497.94	898.36	24.357
205.00	165.15	1086.99	651.89	22.661	285.00	228.38	1503.14	901.48	24.375
206.00	165.95	1092.20	655.01	22.686	286.00	229.17	1508.34	904.59	24.393
207.00	166.74	1097.40	658.13	22.711	287.00	229.96	1513.54	907.71	24.411
208.00	167.53	1102.61	661.25	22.737	288.00	230.75	1518.74	910.83	24.429
209.00	168.32	1107.81	664.37	22.761	289.00	231.54	1523.94	913.95	24.447
210.00	169.11	1113.02	667.50	22.786	290.00	232.33	1529.13	917.07	24.465
211.00	169.90	1118.22	670.62	22.811	291.00	233.12	1534.33	920.19	24.483
212.00	170.69	1123.42	673.74	22.836	292.00	233.90	1539.53	923.31	24.501
213.00	171.48	1128.63	676.86	22.860	293.00	234.69	1544.73	926.42	24.519
214.00	172.27	1133.83	679.98	22.885	294.00	235.48	1549.93	929.54	24.536
215.00	173.06	1139.04	683.10	22.909	295.00	236.27	1555.13	932.66	24.554
216.00	173.85	1144.24	686.22	22.933	296.00	237.06	1560.33	935.78	24.572
217.00	174.64	1149.45	689.34	22.957	297.00	237.85	1565.53	938.90	24.589
218.00	175.43	1154.65	692.46	22.981	298.00	238.64	1570.73	942.02	24.607
219.00	176.23	1159.85	695.58	23.005	299.00	239.43	1575.92	945.13	24.624
220.00	177.02	1165.06	698.71	23.028	300.00	240.22	1581.12	948.25	24.642

27.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.70	20.44	4.85	1.794
4.00	5.83	22.38	6.43	2.373
5.00	6.00	24.85	8.42	2.943
6.00	6.23	27.86	10.80	3.487
7.00	6.53	31.25	13.40	4.014
8.00	6.89	35.34	16.49	4.559
9.00	7.34	40.26	20.18	5.137
10.00	7.87	45.75	24.22	5.716
11.00	8.49	51.66	28.44	6.279
12.00	9.18	57.84	32.72	6.816
13.00	9.93	64.17	36.99	7.322
14.00	10.73	70.54	41.19	7.795
15.00	11.55	76.91	45.31	8.234
16.00	12.39	83.24	49.33	8.643
17.00	13.25	89.50	53.26	9.022
18.00	14.10	95.69	57.11	9.376
19.00	14.96	101.80	60.89	9.707
20.00	15.81	107.86	64.60	10.017
21.00	16.66	113.85	68.26	10.309
22.00	17.51	119.78	71.87	10.585
23.00	18.35	125.66	75.44	10.847
24.00	19.20	131.49	78.97	11.095
25.00	20.03	137.28	82.47	11.331
26.00	20.87	143.03	85.94	11.557
27.00	21.70	148.75	89.38	11.773
28.00	22.53	154.43	92.81	11.979
29.00	23.35	160.09	96.21	12.178
30.00	24.17	165.72	99.59	12.369
31.00	24.99	171.32	102.95	12.552
32.00	25.81	176.91	106.30	12.730
33.00	26.62	182.47	109.64	12.901
34.00	27.43	188.01	112.96	13.066
35.00	28.24	193.54	116.28	13.227
36.00	29.05	199.05	119.58	13.382
37.00	29.85	204.55	122.87	13.532
38.00	30.66	210.03	126.15	13.679
39.00	31.46	215.50	129.43	13.821
40.00	32.26	220.95	132.70	13.959
41.00	33.06	226.40	135.96	14.093
42.00	33.86	231.84	139.21	14.224
43.00	34.65	237.26	142.46	14.352
44.00	35.45	242.68	145.70	14.476
45.00	36.24	248.09	148.94	14.598
46.00	37.03	253.48	152.17	14.717
47.00	37.82	258.88	155.40	14.833
48.00	38.61	264.26	158.62	14.946
49.00	39.40	269.64	161.84	15.057
50.00	40.19	275.01	165.05	15.165
51.00	40.98	280.37	168.26	15.272
52.00	41.76	285.73	171.47	15.376
53.00	42.55	291.09	174.68	15.478
54.00	43.34	296.44	177.88	15.578
55.00	44.12	301.78	181.08	15.676
56.00	44.90	307.12	184.27	15.772
57.00	45.69	312.45	187.46	15.866
58.00	46.47	317.78	190.65	15.959
59.00	47.25	323.11	193.84	16.050
60.00	48.03	328.43	197.03	16.139
61.00	48.81	333.75	200.21	16.227
62.00	49.59	339.06	203.39	16.314
63.00	50.37	344.37	206.57	16.399
64.00	51.15	349.68	209.75	16.482
65.00	51.93	354.98	212.92	16.565
66.00	52.70	360.29	216.10	16.646
67.00	53.48	365.58	219.27	16.725
68.00	54.26	370.88	222.44	16.804
69.00	55.03	376.17	225.61	16.881
70.00	55.81	381.46	228.78	16.957
71.00	56.58	386.75	231.95	17.032
72.00	57.36	392.04	235.11	17.106
73.00	58.13	397.32	238.27	17.179
74.00	58.91	402.60	241.44	17.251
75.00	59.68	407.88	244.60	17.322
76.00	60.46	413.16	247.76	17.391
77.00	61.23	418.44	250.92	17.460
78.00	62.00	423.71	254.08	17.528
79.00	62.78	428.98	257.23	17.596
80.00	63.55	434.25	260.39	17.662
81.00	64.32	439.52	263.54	17.727
82.00	65.09	444.78	266.70	17.792
83.00	65.87	450.05	269.85	17.856
84.00	66.64	455.31	273.00	17.919
85.00	67.41	460.57	276.15	17.981
86.00	68.18	465.83	279.31	18.043
87.00	68.95	471.09	282.46	18.103
88.00	69.72	476.35	285.60	18.164
89.00	70.49	481.61	288.75	18.223
90.00	71.26	486.86	291.90	18.282
91.00	72.03	492.11	295.05	18.340
92.00	72.80	497.37	298.19	18.397
93.00	73.57	502.62	301.34	18.454
94.00	74.34	507.87	304.49	18.510
95.00	75.11	513.12	307.63	18.566
96.00	75.88	518.36	310.77	18.620
97.00	76.65	523.61	313.92	18.675
98.00	77.42	528.86	317.06	18.729
99.00	78.18	534.10	320.20	18.782
100.00	78.95	539.35	323.35	18.835
101.00	79.72	544.59	326.49	18.887
102.00	80.49	549.83	329.63	18.938
103.00	81.26	555.07	332.77	18.990
104.00	82.02	560.31	335.91	19.040
105.00	82.79	565.55	339.05	19.090
106.00	83.56	570.79	342.19	19.140
107.00	84.33	576.03	345.33	19.189
108.00	85.09	581.27	348.46	19.238
109.00	85.86	586.50	351.60	19.286
110.00	86.63	591.74	354.74	19.334
111.00	87.39	596.97	357.88	19.381
112.00	88.16	602.21	361.01	19.428
113.00	88.93	607.44	364.15	19.475
114.00	89.69	612.67	367.29	19.521
115.00	90.46	617.91	370.42	19.567
116.00	91.23	623.14	373.56	19.612
117.00	91.99	628.37	376.69	19.657
118.00	92.76	633.60	379.83	19.701
119.00	93.52	638.83	382.96	19.745
120.00	94.29	644.06	386.09	19.789
121.00	95.06	649.29	389.23	19.833
122.00	95.82	654.52	392.36	19.876
123.00	96.59	659.74	395.49	19.918
124.00	97.35	664.97	398.63	19.961
125.00	98.12	670.20	401.76	20.003
126.00	98.88	675.42	404.89	20.044
127.00	99.65	680.65	408.03	20.086
128.00	100.41	685.87	411.16	20.127
129.00	101.18	691.10	414.29	20.167
130.00	101.94	696.32	417.42	20.208
131.00	102.71	701.55	420.55	20.248
132.00	103.47	706.77	423.68	20.287
133.00	104.24	711.99	426.81	20.327
134.00	105.00	717.21	429.94	20.366
135.00	105.77	722.44	433.07	20.405
136.00	106.53	727.66	436.20	20.443
137.00	107.30	732.88	439.33	20.481
138.00	108.06	738.10	442.46	20.519
139.00	108.82	743.32	445.59	20.557
140.00	109.59	748.54	448.72	20.595

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	110.35	753.76	451.85	20.632	221.00	171.35	1170.57	701.78	22.973
142.00	111.12	758.98	454.98	20.669	222.00	172.11	1175.78	704.90	22.997
143.00	111.88	764.20	458.11	20.705	223.00	172.88	1180.98	708.02	23.020
144.00	112.65	769.42	461.24	20.742	224.00	173.64	1186.19	711.14	23.044
145.00	113.41	774.64	464.36	20.778	225.00	174.40	1191.39	714.26	23.067
146.00	114.17	779.85	467.49	20.814	226.00	175.16	1196.59	717.38	23.090
147.00	114.94	785.07	470.62	20.849	227.00	175.92	1201.80	720.50	23.113
148.00	115.70	790.29	473.75	20.885	228.00	176.68	1207.00	723.62	23.136
149.00	116.46	795.51	476.88	20.920	229.00	177.44	1212.20	726.74	23.158
150.00	117.23	800.72	480.00	20.955	230.00	178.20	1217.41	729.87	23.181
151.00	117.99	805.94	483.13	20.989	231.00	178.97	1222.61	732.99	23.204
152.00	118.76	811.15	486.26	21.024	232.00	179.73	1227.81	736.11	23.226
153.00	119.52	816.37	489.39	21.058	233.00	180.49	1233.02	739.23	23.249
154.00	120.28	821.59	492.51	21.092	234.00	181.25	1238.22	742.35	23.271
155.00	121.05	826.80	495.64	21.126	235.00	182.01	1243.42	745.47	23.293
156.00	121.81	832.02	498.77	21.159	236.00	182.77	1248.62	748.59	23.315
157.00	122.57	837.23	501.89	21.192	237.00	183.53	1253.83	751.71	23.337
158.00	123.34	842.45	505.02	21.226	238.00	184.29	1259.03	754.83	23.359
159.00	124.10	847.66	508.14	21.258	239.00	185.06	1264.23	757.95	23.381
160.00	124.86	852.87	511.27	21.291	240.00	185.82	1269.43	761.07	23.403
161.00	125.63	858.09	514.40	21.324	241.00	186.58	1274.64	764.19	23.424
162.00	126.39	863.30	517.52	21.356	242.00	187.34	1279.84	767.31	23.446
163.00	127.15	868.51	520.65	21.388	243.00	188.10	1285.04	770.43	23.467
164.00	127.91	873.73	523.77	21.420	244.00	188.86	1290.24	773.55	23.489
165.00	128.68	878.94	526.90	21.452	245.00	189.62	1295.44	776.67	23.510
166.00	129.44	884.15	530.02	21.483	246.00	190.38	1300.65	779.79	23.531
167.00	130.20	889.36	533.15	21.514	247.00	191.14	1305.85	782.91	23.552
168.00	130.97	894.58	536.27	21.545	248.00	191.90	1311.05	786.03	23.573
169.00	131.73	899.79	539.40	21.576	249.00	192.67	1316.25	789.15	23.594
170.00	132.49	905.00	542.52	21.607	250.00	193.43	1321.45	792.27	23.615
171.00	133.25	910.21	545.65	21.638	251.00	194.19	1326.66	795.39	23.636
172.00	134.02	915.42	548.77	21.668	252.00	194.95	1331.86	798.51	23.656
173.00	134.78	920.63	551.90	21.698	253.00	195.71	1337.06	801.63	23.677
174.00	135.54	925.84	555.02	21.728	254.00	196.47	1342.26	804.75	23.697
175.00	136.30	931.06	558.15	21.758	255.00	197.23	1347.46	807.87	23.718
176.00	137.07	936.27	561.27	21.788	256.00	197.99	1352.66	810.99	23.738
177.00	137.83	941.48	564.40	21.817	257.00	198.75	1357.86	814.10	23.759
178.00	138.59	946.69	567.52	21.847	258.00	199.51	1363.06	817.22	23.779
179.00	139.35	951.90	570.64	21.876	259.00	200.27	1368.27	820.34	23.799
180.00	140.12	957.11	573.77	21.905	260.00	201.04	1373.47	823.46	23.819
181.00	140.88	962.32	576.89	21.934	261.00	201.80	1378.67	826.58	23.839
182.00	141.64	967.52	580.01	21.963	262.00	202.56	1383.87	829.70	23.859
183.00	142.40	972.73	583.14	21.991	263.00	203.32	1389.07	832.82	23.879
184.00	143.17	977.94	586.26	22.019	264.00	204.08	1394.27	835.94	23.898
185.00	143.93	983.15	589.39	22.048	265.00	204.84	1399.47	839.06	23.918
186.00	144.69	988.36	592.51	22.076	266.00	205.60	1404.67	842.18	23.938
187.00	145.45	993.57	595.63	22.104	267.00	206.36	1409.87	845.30	23.957
188.00	146.22	998.78	598.75	22.131	268.00	207.12	1415.07	848.42	23.977
189.00	146.98	1003.98	601.88	22.159	269.00	207.88	1420.27	851.54	23.996
190.00	147.74	1009.19	605.00	22.187	270.00	208.64	1425.47	854.66	24.015
191.00	148.50	1014.40	608.12	22.214	271.00	209.40	1430.67	857.77	24.034
192.00	149.26	1019.61	611.25	22.241	272.00	210.17	1435.87	860.89	24.054
193.00	150.03	1024.82	614.37	22.268	273.00	210.93	1441.07	864.01	24.073
194.00	150.79	1030.02	617.49	22.295	274.00	211.69	1446.27	867.13	24.092
195.00	151.55	1035.23	620.61	22.322	275.00	212.45	1451.47	870.25	24.111
196.00	152.31	1040.44	623.74	22.348	276.00	213.21	1456.67	873.37	24.129
197.00	153.07	1045.64	626.86	22.375	277.00	213.97	1461.87	876.49	24.148
198.00	153.84	1050.85	629.98	22.401	278.00	214.73	1467.07	879.61	24.167
199.00	154.60	1056.06	633.10	22.428	279.00	215.49	1472.27	882.73	24.186
200.00	155.36	1061.26	636.23	22.454	280.00	216.25	1477.47	885.84	24.204
201.00	156.12	1066.47	639.35	22.480	281.00	217.01	1482.67	888.96	24.223
202.00	156.88	1071.68	642.47	22.505	282.00	217.77	1487.87	892.08	24.241
203.00	157.64	1076.88	645.59	22.531	283.00	218.53	1493.07	895.20	24.260
204.00	158.41	1082.09	648.71	22.557	284.00	219.29	1498.27	898.32	24.278
205.00	159.17	1087.30	651.84	22.582	285.00	220.05	1503.47	901.44	24.296
206.00	159.93	1092.50	654.96	22.608	286.00	220.81	1508.67	904.56	24.315
207.00	160.69	1097.71	658.08	22.633	287.00	221.57	1513.87	907.68	24.333
208.00	161.45	1102.91	661.20	22.658	288.00	222.34	1519.07	910.79	24.351
209.00	162.21	1108.12	664.32	22.683	289.00	223.10	1524.27	913.91	24.369
210.00	162.98	1113.32	667.44	22.708	290.00	223.86	1529.47	917.03	24.387
211.00	163.74	1118.53	670.57	22.732	291.00	224.62	1534.67	920.15	24.405
212.00	164.50	1123.73	673.69	22.757	292.00	225.38	1539.87	923.27	24.422
213.00	165.26	1128.94	676.81	22.782	293.00	226.14	1545.07	926.39	24.440
214.00	166.02	1134.14	679.93	22.806	294.00	226.90	1550.27	929.51	24.458
215.00	166.78	1139.35	683.05	22.830	295.00	227.66	1555.46	932.62	24.476
216.00	167.55	1144.55	686.17	22.854	296.00	228.42	1560.66	935.74	24.493
217.00	168.31	1149.76	689.29	22.878	297.00	229.18	1565.86	938.86	24.511
218.00	169.07	1154.96	692.42	22.902	298.00	229.94	1571.06	941.98	24.528
219.00	169.83	1160.17	695.54	22.926	299.00	230.70	1576.26	945.10	24.546
220.00	170.59	1165.37	698.66	22.950	300.00	231.46	1581.46	948.22	24.563

28.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
					61.00	47.16	333.87	200.06	16.150
					62.00	47.92	339.19	203.25	16.236
					63.00	48.67	344.51	206.43	16.321
					64.00	49.42	349.82	209.61	16.405
					65.00	50.17	355.12	212.78	16.487
					66.00	50.92	360.43	215.96	16.568
					67.00	51.67	365.73	219.13	16.648
					68.00	52.42	371.03	222.31	16.726
					69.00	53.17	376.32	225.48	16.804
					70.00	53.92	381.62	228.65	16.880
					71.00	54.67	386.91	231.81	16.955
					72.00	55.41	392.20	234.98	17.029
					73.00	56.16	397.48	238.15	17.102
					74.00	56.91	402.77	241.31	17.174
					75.00	57.65	408.05	244.47	17.245
					76.00	58.40	413.33	247.64	17.314
					77.00	59.15	418.61	250.80	17.383
					78.00	59.89	423.88	253.95	17.452
					79.00	60.64	429.16	257.11	17.519
					80.00	61.38	434.43	260.27	17.585
					81.00	62.13	439.70	263.43	17.651
					82.00	62.87	444.97	266.58	17.715
3.00	5.67	20.98	4.89	1.782	83.00	63.62	450.23	269.74	17.779
4.00	5.80	22.91	6.45	2.358	84.00	64.36	455.50	272.89	17.842
5.00	5.97	25.36	8.42	2.924	85.00	65.11	460.76	276.04	17.904
6.00	6.19	28.33	10.77	3.462	86.00	65.85	466.02	279.19	17.966
7.00	6.47	31.68	13.32	3.982	87.00	66.59	471.29	282.35	18.027
8.00	6.82	35.72	16.36	4.519	88.00	67.34	476.54	285.50	18.087
9.00	7.25	40.56	20.00	5.089	89.00	68.08	481.80	288.65	18.146
10.00	7.75	45.98	23.99	5.659	90.00	68.82	487.06	291.79	18.205
11.00	8.33	51.80	28.16	6.214	91.00	69.57	492.32	294.94	18.263
12.00	8.99	57.90	32.41	6.745	92.00	70.31	497.57	298.09	18.320
13.00	9.70	64.16	36.65	7.246	93.00	71.05	502.82	301.24	18.377
14.00	10.45	70.49	40.83	7.715	94.00	71.79	508.07	304.38	18.433
15.00	11.24	76.83	44.94	8.152	95.00	72.54	513.32	307.53	18.489
16.00	12.04	83.13	48.96	8.559	96.00	73.28	518.57	310.67	18.544
17.00	12.86	89.38	52.90	8.937	97.00	74.02	523.82	313.82	18.598
18.00	13.68	95.56	56.76	9.291	98.00	74.76	529.07	316.96	18.652
19.00	14.50	101.68	60.54	9.622	99.00	75.50	534.32	320.11	18.705
20.00	15.32	107.74	64.27	9.932	100.00	76.24	539.56	323.25	18.758
21.00	16.14	113.73	67.93	10.225	101.00	76.98	544.81	326.39	18.810
22.00	16.96	119.67	71.55	10.501	102.00	77.72	550.05	329.53	18.862
23.00	17.77	125.56	75.13	10.763	103.00	78.47	555.29	332.67	18.913
24.00	18.58	131.40	78.67	11.011	104.00	79.21	560.54	335.81	18.964
25.00	19.39	137.20	82.18	11.248	105.00	79.95	565.78	338.95	19.014
26.00	20.20	142.96	85.66	11.474	106.00	80.69	571.02	342.09	19.064
27.00	21.00	148.68	89.11	11.690	107.00	81.43	576.26	345.23	19.113
28.00	21.80	154.38	92.53	11.897	108.00	82.17	581.49	348.37	19.162
29.00	22.59	160.04	95.94	12.096	109.00	82.91	586.73	351.51	19.210
30.00	23.39	165.68	99.33	12.287	110.00	83.65	591.97	354.65	19.258
31.00	24.18	171.29	102.70	12.471	111.00	84.39	597.21	357.79	19.305
32.00	24.96	176.88	106.06	12.649	112.00	85.13	602.44	360.93	19.352
33.00	25.75	182.45	109.40	12.820	113.00	85.86	607.68	364.06	19.399
34.00	26.53	188.00	112.73	12.986	114.00	86.60	612.91	367.20	19.445
35.00	27.31	193.54	116.05	13.146	115.00	87.34	618.14	370.34	19.490
36.00	28.09	199.06	119.35	13.302	116.00	88.08	623.38	373.47	19.536
37.00	28.87	204.56	122.65	13.452	117.00	88.82	628.61	376.61	19.581
38.00	29.65	210.05	125.94	13.599	118.00	89.56	633.84	379.74	19.625
39.00	30.42	215.52	129.22	13.741	119.00	90.30	639.07	382.88	19.669
40.00	31.19	220.99	132.49	13.879	120.00	91.04	644.30	386.01	19.713
41.00	31.96	226.44	135.75	14.014	121.00	91.78	649.53	389.15	19.756
42.00	32.73	231.88	139.01	14.145	122.00	92.51	654.76	392.28	19.799
43.00	33.50	237.31	142.26	14.273	123.00	93.25	659.99	395.41	19.842
44.00	34.27	242.73	145.51	14.397	124.00	93.99	665.22	398.55	19.884
45.00	35.03	248.14	148.75	14.519	125.00	94.73	670.45	401.68	19.926
46.00	35.80	253.55	151.98	14.638	126.00	95.47	675.67	404.81	19.968
47.00	36.56	258.95	155.21	14.754	127.00	96.21	680.90	407.95	20.009
48.00	37.32	264.33	158.44	14.867	128.00	96.94	686.13	411.08	20.050
49.00	38.09	269.72	161.66	14.978	129.00	97.68	691.35	414.21	20.091
50.00	38.85	275.09	164.88	15.087	130.00	98.42	696.58	417.34	20.131
51.00	39.61	280.46	168.09	15.193	131.00	99.16	701.80	420.47	20.171
52.00	40.36	285.83	171.30	15.297	132.00	99.89	707.02	423.61	20.211
53.00	41.12	291.18	174.51	15.399	133.00	100.63	712.25	426.74	20.251
54.00	41.88	296.54	177.71	15.500	134.00	101.37	717.47	429.87	20.290
55.00	42.64	301.88	180.91	15.598	135.00	102.11	722.70	433.00	20.329
56.00	43.39	307.23	184.11	15.694	136.00	102.84	727.92	436.13	20.367
57.00	44.15	312.56	187.31	15.788	137.00	103.58	733.14	439.26	20.405
58.00	44.90	317.90	190.50	15.881	138.00	104.32	738.36	442.39	20.443
59.00	45.66	323.23	193.69	15.972	139.00	105.06	743.58	445.52	20.481
60.00	46.41	328.55	196.88	16.062	140.00	105.79	748.80	448.65	20.518

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	106.53	754.02	451.78	20.556	221.00	165.36	1170.89	701.73	22.898
142.00	107.27	759.24	454.91	20.593	222.00	166.09	1176.09	704.85	22.921
143.00	108.00	764.46	458.04	20.629	223.00	166.83	1181.30	707.97	22.945
144.00	108.74	769.68	461.17	20.666	224.00	167.56	1186.50	711.09	22.968
145.00	109.48	774.90	464.29	20.702	225.00	168.30	1191.70	714.22	22.991
146.00	110.21	780.12	467.42	20.738	226.00	169.03	1196.91	717.34	23.014
147.00	110.95	785.34	470.55	20.773	227.00	169.77	1202.11	720.46	23.037
148.00	111.69	790.56	473.68	20.809	228.00	170.50	1207.32	723.58	23.060
149.00	112.42	795.78	476.81	20.844	229.00	171.23	1212.52	726.70	23.083
150.00	113.16	800.99	479.94	20.879	230.00	171.97	1217.72	729.82	23.105
151.00	113.90	806.21	483.06	20.913	231.00	172.70	1222.93	732.94	23.128
152.00	114.63	811.43	486.19	20.948	232.00	173.44	1228.13	736.06	23.150
153.00	115.37	816.65	489.32	20.982	233.00	174.17	1233.33	739.18	23.173
154.00	116.11	821.86	492.45	21.016	234.00	174.90	1238.54	742.30	23.195
155.00	116.84	827.08	495.57	21.050	235.00	175.64	1243.74	745.42	23.217
156.00	117.58	832.29	498.70	21.083	236.00	176.37	1248.94	748.54	23.239
157.00	118.32	837.51	501.83	21.116	237.00	177.11	1254.15	751.66	23.261
158.00	119.05	842.72	504.95	21.150	238.00	177.84	1259.35	754.78	23.283
159.00	119.79	847.94	508.08	21.182	239.00	178.57	1264.55	757.90	23.305
160.00	120.52	853.15	511.21	21.215	240.00	179.31	1269.75	761.02	23.327
161.00	121.26	858.37	514.33	21.248	241.00	180.04	1274.96	764.14	23.348
162.00	122.00	863.58	517.46	21.280	242.00	180.78	1280.16	767.26	23.370
163.00	122.73	868.80	520.59	21.312	243.00	181.51	1285.36	770.38	23.391
164.00	123.47	874.01	523.71	21.344	244.00	182.24	1290.56	773.51	23.413
165.00	124.20	879.22	526.84	21.376	245.00	182.98	1295.77	776.63	23.434
166.00	124.94	884.44	529.96	21.407	246.00	183.71	1300.97	779.75	23.455
167.00	125.67	889.65	533.09	21.438	247.00	184.45	1306.17	782.87	23.476
168.00	126.41	894.86	536.21	21.470	248.00	185.18	1311.37	785.99	23.497
169.00	127.15	900.07	539.34	21.500	249.00	185.91	1316.57	789.11	23.518
170.00	127.88	905.29	542.46	21.531	250.00	186.65	1321.78	792.23	23.539
171.00	128.62	910.50	545.59	21.562	251.00	187.38	1326.98	795.34	23.560
172.00	129.35	915.71	548.71	21.592	252.00	188.12	1332.18	798.46	23.581
173.00	130.09	920.92	551.84	21.622	253.00	188.85	1337.38	801.58	23.601
174.00	130.82	926.13	554.96	21.652	254.00	189.58	1342.58	804.70	23.622
175.00	131.56	931.35	558.09	21.682	255.00	190.32	1347.79	807.82	23.642
176.00	132.29	936.56	561.21	21.712	256.00	191.05	1352.99	810.94	23.663
177.00	133.03	941.77	564.34	21.742	257.00	191.78	1358.19	814.06	23.683
178.00	133.77	946.98	567.46	21.771	258.00	192.52	1363.39	817.18	23.703
179.00	134.50	952.19	570.59	21.800	259.00	193.25	1368.59	820.30	23.723
180.00	135.24	957.40	573.71	21.829	260.00	193.99	1373.79	823.42	23.743
181.00	135.97	962.61	576.83	21.858	261.00	194.72	1378.99	826.54	23.763
182.00	136.71	967.82	579.96	21.887	262.00	195.45	1384.19	829.66	23.783
183.00	137.44	973.03	583.08	21.915	263.00	196.19	1389.40	832.78	23.803
184.00	138.18	978.24	586.21	21.944	264.00	196.92	1394.60	835.90	23.823
185.00	138.91	983.45	589.33	21.972	265.00	197.65	1399.80	839.02	23.842
186.00	139.65	988.66	592.45	22.000	266.00	198.39	1405.00	842.14	23.862
187.00	140.38	993.86	595.58	22.028	267.00	199.12	1410.20	845.26	23.881
188.00	141.12	999.07	598.70	22.056	268.00	199.85	1415.40	848.38	23.901
189.00	141.85	1004.28	601.82	22.083	269.00	200.59	1420.60	851.50	23.920
190.00	142.59	1009.49	604.95	22.111	270.00	201.32	1425.80	854.62	23.939
191.00	143.32	1014.70	608.07	22.138	271.00	202.06	1431.00	857.74	23.959
192.00	144.06	1019.91	611.19	22.165	272.00	202.79	1436.20	860.85	23.978
193.00	144.79	1025.12	614.32	22.192	273.00	203.52	1441.40	863.97	23.997
194.00	145.53	1030.32	617.44	22.219	274.00	204.26	1446.60	867.09	24.016
195.00	146.26	1035.53	620.56	22.246	275.00	204.99	1451.80	870.21	24.035
196.00	147.00	1040.74	623.68	22.273	276.00	205.72	1457.00	873.33	24.054
197.00	147.73	1045.95	626.81	22.299	277.00	206.46	1462.20	876.45	24.073
198.00	148.47	1051.15	629.93	22.326	278.00	207.19	1467.40	879.57	24.091
199.00	149.20	1056.36	633.05	22.352	279.00	207.92	1472.60	882.69	24.110
200.00	149.94	1061.57	636.17	22.378	280.00	208.66	1477.80	885.81	24.129
201.00	150.67	1066.77	639.30	22.404	281.00	209.39	1483.00	888.93	24.147
202.00	151.41	1071.98	642.42	22.430	282.00	210.12	1488.20	892.04	24.166
203.00	152.14	1077.19	645.54	22.455	283.00	210.86	1493.40	895.16	24.184
204.00	152.87	1082.39	648.66	22.481	284.00	211.59	1498.60	898.28	24.202
205.00	153.61	1087.60	651.79	22.506	285.00	212.33	1503.80	901.40	24.221
206.00	154.34	1092.81	654.91	22.532	286.00	213.06	1509.00	904.52	24.239
207.00	155.08	1098.01	658.03	22.557	287.00	213.79	1514.20	907.64	24.257
208.00	155.81	1103.22	661.15	22.582	288.00	214.53	1519.40	910.76	24.275
209.00	156.55	1108.43	664.27	22.607	289.00	215.26	1524.60	913.88	24.293
210.00	157.28	1113.63	667.40	22.632	290.00	215.99	1529.80	916.99	24.311
211.00	158.02	1118.84	670.52	22.657	291.00	216.73	1535.00	920.11	24.329
212.00	158.75	1124.04	673.64	22.681	292.00	217.46	1540.20	923.23	24.347
213.00	159.49	1129.25	676.76	22.706	293.00	218.19	1545.40	926.35	24.365
214.00	160.22	1134.45	679.88	22.730	294.00	218.93	1550.60	929.47	24.382
215.00	160.95	1139.66	683.00	22.754	295.00	219.66	1555.80	932.59	24.400
216.00	161.69	1144.86	686.12	22.779	296.00	220.39	1561.00	935.71	24.418
217.00	162.42	1150.07	689.25	22.803	297.00	221.13	1566.20	938.83	24.435
218.00	163.16	1155.27	692.37	22.827	298.00	221.86	1571.40	941.94	24.453
219.00	163.89	1160.48	695.49	22.850	299.00	222.59	1576.60	945.06	24.470
220.00	164.63	1165.68	698.61	22.874	300.00	223.33	1581.80	948.18	24.487

29.00 ATMOSPHERE 1508AR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.65	21.52	4.92	1.771
4.00	5.77	23.44	6.47	2.343
5.00	5.94	25.87	8.41	2.904
6.00	6.15	28.81	10.73	3.437
7.00	6.42	32.12	13.25	3.951
8.00	6.76	36.10	16.25	4.481
9.00	7.16	40.88	19.84	5.043
10.00	7.64	46.22	23.77	5.605
11.00	8.19	51.97	27.90	6.153
12.00	8.81	57.99	32.11	6.677
13.00	9.48	64.19	36.32	7.173
14.00	10.20	70.47	40.49	7.638
15.00	10.95	76.77	44.59	8.073
16.00	11.72	83.05	48.61	8.478
17.00	12.50	89.28	52.55	8.856
18.00	13.29	95.46	56.41	9.209
19.00	14.08	101.58	60.21	9.540
20.00	14.87	107.63	63.94	9.851
21.00	15.66	113.63	67.61	10.143
22.00	16.45	119.58	71.24	10.420
23.00	17.23	125.47	74.83	10.682
24.00	18.02	131.32	78.37	10.931
25.00	18.80	137.13	81.89	11.168
26.00	19.57	142.89	85.37	11.394
27.00	20.35	148.63	88.83	11.610
28.00	21.12	154.33	92.27	11.818
29.00	21.89	160.00	95.68	12.017
30.00	22.65	165.65	99.08	12.208
31.00	23.42	171.27	102.45	12.392
32.00	24.18	176.87	105.82	12.570
33.00	24.94	182.44	109.16	12.742
34.00	25.69	188.00	112.50	12.908
35.00	26.45	193.54	115.82	13.068
36.00	27.20	199.07	119.13	13.224
37.00	27.95	204.58	122.43	13.375
38.00	28.70	210.07	125.73	13.522
39.00	29.45	215.55	129.01	13.664
40.00	30.20	221.02	132.29	13.802
41.00	30.94	226.48	135.55	13.937
42.00	31.69	231.92	138.82	14.068
43.00	32.43	237.36	142.07	14.196
44.00	33.17	242.79	145.32	14.321
45.00	33.91	248.21	148.56	14.443
46.00	34.65	253.62	151.80	14.562
47.00	35.39	259.02	155.03	14.678
48.00	36.12	264.41	158.26	14.791
49.00	36.86	269.80	161.49	14.903
50.00	37.59	275.18	164.71	15.011
51.00	38.33	280.55	167.92	15.118
52.00	39.06	285.92	171.14	15.222
53.00	39.79	291.28	174.35	15.324
54.00	40.53	296.64	177.55	15.424
55.00	41.26	301.99	180.76	15.522
56.00	41.99	307.34	183.96	15.619
57.00	42.72	312.68	187.15	15.713
58.00	43.45	318.01	190.35	15.806
59.00	44.17	323.35	193.54	15.897
60.00	44.90	328.68	196.73	15.987
61.00	45.63	334.00	199.92	16.075
62.00	46.36	339.32	203.10	16.161
63.00	47.08	344.64	206.29	16.246
64.00	47.81	349.95	209.47	16.330
65.00	48.53	355.26	212.65	16.412
66.00	49.26	360.57	215.82	16.493
67.00	49.98	365.88	219.00	16.573
68.00	50.71	371.18	222.17	16.652
69.00	51.43	376.48	225.35	16.729
70.00	52.15	381.77	228.52	16.805
71.00	52.88	387.07	231.69	16.880
72.00	53.60	392.36	234.85	16.954
73.00	54.32	397.65	238.02	17.027
74.00	55.04	402.93	241.19	17.099
75.00	55.77	408.22	244.35	17.170
76.00	56.49	413.50	247.51	17.240
77.00	57.21	418.78	250.67	17.309
78.00	57.93	424.06	253.84	17.377
79.00	58.65	429.33	256.99	17.444
80.00	59.37	434.61	260.15	17.511
81.00	60.09	439.88	263.31	17.576
82.00	60.81	445.15	266.47	17.641
83.00	61.53	450.42	269.62	17.705
84.00	62.25	455.69	272.78	17.768
85.00	62.96	460.95	275.93	17.830
86.00	63.68	466.22	279.08	17.892
87.00	64.40	471.48	282.24	17.953
88.00	65.12	476.74	285.39	18.013
89.00	65.84	482.00	288.54	18.072
90.00	66.55	487.26	291.69	18.131
91.00	67.27	492.52	294.84	18.189
92.00	67.99	497.77	297.99	18.247
93.00	68.71	503.03	301.13	18.303
94.00	69.42	508.28	304.28	18.360
95.00	70.14	513.53	307.43	18.415
96.00	70.86	518.78	310.57	18.470
97.00	71.57	524.04	313.72	18.525
98.00	72.29	529.28	316.86	18.578
99.00	73.00	534.53	320.01	18.632
100.00	73.72	539.78	323.15	18.684
101.00	74.44	545.03	326.29	18.737
102.00	75.15	550.27	329.44	18.788
103.00	75.87	555.51	332.58	18.839
104.00	76.58	560.76	335.72	18.890
105.00	77.30	566.00	338.86	18.940
106.00	78.01	571.24	342.00	18.990
107.00	78.73	576.48	345.14	19.039
108.00	79.44	581.72	348.28	19.088
109.00	80.16	586.96	351.42	19.136
110.00	80.87	592.20	354.56	19.184
111.00	81.59	597.44	357.70	19.231
112.00	82.30	602.67	360.84	19.278
113.00	83.01	607.91	363.98	19.325
114.00	83.73	613.15	367.11	19.371
115.00	84.44	618.38	370.25	19.417
116.00	85.16	623.62	373.39	19.462
117.00	85.87	628.85	376.52	19.507
118.00	86.58	634.08	379.66	19.552
119.00	87.30	639.31	382.79	19.596
120.00	88.01	644.55	385.93	19.639
121.00	88.72	649.78	389.06	19.683
122.00	89.44	655.01	392.20	19.726
123.00	90.15	660.24	395.33	19.769
124.00	90.86	665.47	398.47	19.811
125.00	91.57	670.69	401.60	19.853
126.00	92.29	675.92	404.73	19.895
127.00	93.00	681.15	407.87	19.936
128.00	93.71	686.38	411.00	19.977
129.00	94.43	691.60	414.13	20.018
130.00	95.14	696.83	417.27	20.058
131.00	95.85	702.06	420.40	20.098
132.00	96.56	707.28	423.53	20.138
133.00	97.28	712.51	426.66	20.177
134.00	97.99	717.73	429.79	20.216
135.00	98.70	722.95	432.92	20.255
136.00	99.41	728.18	436.06	20.294
137.00	100.12	733.40	439.19	20.332
138.00	100.84	738.62	442.32	20.370
139.00	101.55	743.85	445.45	20.408
140.00	102.26	749.07	448.58	20.445

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	102.97	754.29	451.71	20.482	221.00	159.78	1171.20	701.68	22.825
142.00	103.68	759.51	454.84	20.519	222.00	160.49	1176.40	704.80	22.848
143.00	104.39	764.73	457.97	20.556	223.00	161.20	1181.61	707.93	22.871
144.00	105.11	769.95	461.10	20.592	224.00	161.91	1186.81	711.05	22.895
145.00	105.82	775.17	464.23	20.628	225.00	162.62	1192.02	714.17	22.918
146.00	106.53	780.39	467.35	20.664	226.00	163.33	1197.22	717.29	22.941
147.00	107.24	785.61	470.48	20.700	227.00	164.03	1202.43	720.41	22.964
148.00	107.95	790.83	473.61	20.735	228.00	164.74	1207.63	723.53	22.987
149.00	108.66	796.05	476.74	20.770	229.00	165.45	1212.83	726.65	23.010
150.00	109.37	801.27	479.87	20.805	230.00	166.16	1218.04	729.77	23.032
151.00	110.09	806.48	483.00	20.840	231.00	166.87	1223.24	732.89	23.055
152.00	110.80	811.70	486.12	20.874	232.00	167.58	1228.45	736.02	23.077
153.00	111.51	816.92	489.25	20.909	233.00	168.29	1233.65	739.14	23.100
154.00	112.22	822.14	492.38	20.943	234.00	169.00	1238.85	742.26	23.122
155.00	112.93	827.35	495.51	20.976	235.00	169.71	1244.06	745.38	23.144
156.00	113.64	832.57	498.63	21.010	236.00	170.41	1249.26	748.50	23.166
157.00	114.35	837.79	501.76	21.043	237.00	171.12	1254.46	751.62	23.188
158.00	115.06	843.00	504.89	21.076	238.00	171.83	1259.67	754.74	23.210
159.00	115.77	848.22	508.02	21.109	239.00	172.54	1264.87	757.86	23.232
160.00	116.48	853.43	511.14	21.142	240.00	173.25	1270.07	760.98	23.254
161.00	117.20	858.65	514.27	21.174	241.00	173.96	1275.28	764.10	23.275
162.00	117.91	863.86	517.40	21.207	242.00	174.67	1280.48	767.22	23.297
163.00	118.62	869.08	520.52	21.239	243.00	175.38	1285.68	770.34	23.318
164.00	119.33	874.29	523.65	21.271	244.00	176.08	1290.88	773.46	23.340
165.00	120.04	879.51	526.77	21.302	245.00	176.79	1296.09	776.58	23.361
166.00	120.75	884.72	529.90	21.334	246.00	177.50	1301.29	779.70	23.382
167.00	121.46	889.93	533.03	21.365	247.00	178.21	1306.49	782.82	23.403
168.00	122.17	895.15	536.15	21.396	248.00	178.92	1311.69	785.94	23.424
169.00	122.88	900.36	539.28	21.427	249.00	179.63	1316.90	789.06	23.445
170.00	123.59	905.57	542.40	21.458	250.00	180.34	1322.10	792.18	23.466
171.00	124.30	910.79	545.53	21.489	251.00	181.04	1327.30	795.30	23.487
172.00	125.01	916.00	548.65	21.519	252.00	181.75	1332.50	798.42	23.508
173.00	125.72	921.21	551.78	21.549	253.00	182.46	1337.71	801.54	23.528
174.00	126.43	926.42	554.90	21.579	254.00	183.17	1342.91	804.66	23.549
175.00	127.14	931.63	558.03	21.609	255.00	183.88	1348.11	807.78	23.569
176.00	127.85	936.85	561.15	21.639	256.00	184.59	1353.31	810.90	23.589
177.00	128.56	942.06	564.28	21.668	257.00	185.30	1358.51	814.02	23.610
178.00	129.27	947.27	567.40	21.698	258.00	186.00	1363.72	817.14	23.630
179.00	129.98	952.48	570.53	21.727	259.00	186.71	1368.92	820.26	23.650
180.00	130.69	957.69	573.65	21.756	260.00	187.42	1374.12	823.38	23.670
181.00	131.40	962.90	576.78	21.785	261.00	188.13	1379.32	826.50	23.690
182.00	132.11	968.11	579.90	21.813	262.00	188.84	1384.52	829.62	23.710
183.00	132.82	973.32	583.02	21.842	263.00	189.55	1389.72	832.74	23.730
184.00	133.53	978.53	586.15	21.870	264.00	190.25	1394.92	835.86	23.750
185.00	134.24	983.74	589.27	21.899	265.00	190.96	1400.13	838.98	23.769
186.00	134.95	988.95	592.40	21.927	266.00	191.67	1405.33	842.10	23.789
187.00	135.66	994.16	595.52	21.955	267.00	192.38	1410.53	845.22	23.808
188.00	136.37	999.37	598.64	21.982	268.00	193.09	1415.73	848.34	23.828
189.00	137.08	1004.58	601.77	22.010	269.00	193.80	1420.93	851.46	23.847
190.00	137.79	1009.79	604.89	22.038	270.00	194.51	1426.13	854.58	23.866
191.00	138.50	1015.00	608.01	22.065	271.00	195.21	1431.33	857.70	23.886
192.00	139.21	1020.21	611.14	22.092	272.00	195.92	1436.53	860.82	23.905
193.00	139.92	1025.42	614.26	22.119	273.00	196.63	1441.73	863.93	23.924
194.00	140.63	1030.62	617.38	22.146	274.00	197.34	1446.93	867.05	23.943
195.00	141.34	1035.83	620.51	22.173	275.00	198.05	1452.13	870.17	23.962
196.00	142.05	1041.04	623.63	22.200	276.00	198.76	1457.33	873.29	23.981
197.00	142.76	1046.25	626.75	22.226	277.00	199.46	1462.54	876.41	24.000
198.00	143.47	1051.46	629.88	22.252	278.00	200.17	1467.74	879.53	24.018
199.00	144.18	1056.66	633.00	22.279	279.00	200.88	1472.94	882.65	24.037
200.00	144.89	1061.87	636.12	22.305	280.00	201.59	1478.14	885.77	24.056
201.00	145.60	1067.08	639.24	22.331	281.00	202.30	1483.34	888.89	24.074
202.00	146.31	1072.29	642.37	22.357	282.00	203.00	1488.54	892.01	24.093
203.00	147.01	1077.49	645.49	22.382	283.00	203.71	1493.74	895.13	24.111
204.00	147.72	1082.70	648.61	22.408	284.00	204.42	1498.94	898.24	24.129
205.00	148.43	1087.91	651.73	22.433	285.00	205.13	1504.14	901.36	24.148
206.00	149.14	1093.11	654.86	22.459	286.00	205.84	1509.34	904.48	24.166
207.00	149.85	1098.32	657.98	22.484	287.00	206.55	1514.54	907.60	24.184
208.00	150.56	1103.53	661.10	22.509	288.00	207.25	1519.74	910.72	24.202
209.00	151.27	1108.73	664.22	22.534	289.00	207.96	1524.94	913.84	24.220
210.00	151.98	1113.94	667.35	22.559	290.00	208.67	1530.14	916.96	24.238
211.00	152.69	1119.14	670.47	22.583	291.00	209.38	1535.34	920.08	24.256
212.00	153.40	1124.35	673.59	22.608	292.00	210.09	1540.54	923.20	24.274
213.00	154.11	1129.56	676.71	22.633	293.00	210.80	1545.74	926.31	24.292
214.00	154.82	1134.76	679.83	22.657	294.00	211.50	1550.94	929.43	24.309
215.00	155.53	1139.97	682.95	22.681	295.00	212.21	1556.14	932.55	24.327
216.00	156.24	1145.17	686.08	22.705	296.00	212.92	1561.33	935.67	24.345
217.00	156.94	1150.38	689.20	22.729	297.00	213.63	1566.53	938.79	24.362
218.00	157.65	1155.58	692.32	22.753	298.00	214.34	1571.73	941.91	24.380
219.00	158.36	1160.79	695.44	22.777	299.00	215.04	1576.93	945.03	24.397
220.00	159.07	1165.99	698.56	22.801	300.00	215.75	1582.13	948.14	24.414

30.00 ATMOSPHERE 1SO8AR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.63	22.06	4.96	1.760
4.00	5.75	23.97	6.49	2.329
5.00	5.91	26.37	8.41	2.986
6.00	6.11	29.28	10.70	3.413
7.00	6.37	32.56	13.18	3.921
8.00	6.69	36.49	16.14	4.444
9.00	7.08	41.21	19.68	4.999
10.00	7.54	46.48	23.57	5.554
11.00	8.06	52.16	27.66	6.095
12.00	8.65	58.11	31.83	6.613
13.00	9.29	64.24	36.01	7.104
14.00	9.97	70.47	40.16	7.566
15.00	10.69	76.74	44.25	7.998
16.00	11.42	82.99	48.27	8.401
17.00	12.17	89.21	52.21	8.778
18.00	12.93	95.38	56.08	9.131
19.00	13.69	101.49	59.88	9.461
20.00	14.45	107.55	63.62	9.772
21.00	15.21	113.55	67.30	10.065
22.00	15.97	119.50	70.94	10.341
23.00	16.73	125.39	74.53	10.604
24.00	17.49	131.25	78.08	10.853
25.00	18.24	137.06	81.61	11.090
26.00	18.99	142.84	85.10	11.317
27.00	19.74	148.58	88.56	11.533
28.00	20.49	154.29	92.01	11.741
29.00	21.23	159.97	95.43	11.940
30.00	21.97	165.62	98.83	12.132
31.00	22.71	171.25	102.21	12.317
32.00	23.45	176.85	105.58	12.494
33.00	24.18	182.44	108.93	12.666
34.00	24.91	188.00	112.27	12.832
35.00	25.64	193.55	115.60	12.993
36.00	26.37	199.08	118.91	13.149
37.00	27.10	204.60	122.22	13.300
38.00	27.82	210.10	125.52	13.447
39.00	28.55	215.59	128.80	13.589
40.00	29.27	221.06	132.08	13.728
41.00	29.99	226.52	135.35	13.863
42.00	30.71	231.98	138.62	13.994
43.00	31.43	237.42	141.88	14.122
44.00	32.15	242.85	145.13	14.247
45.00	32.86	248.27	148.38	14.369
46.00	33.58	253.69	151.62	14.488
47.00	34.29	259.09	154.86	14.604
48.00	35.00	264.49	158.09	14.718
49.00	35.72	269.88	161.31	14.829
50.00	36.43	275.27	164.54	14.938
51.00	37.14	280.65	167.76	15.045
52.00	37.85	286.02	170.97	15.149
53.00	38.55	291.38	174.18	15.251
54.00	39.26	296.74	177.39	15.351
55.00	39.97	302.10	180.60	15.449
56.00	40.68	307.45	183.80	15.546
57.00	41.38	312.79	187.00	15.641
58.00	42.09	318.14	190.20	15.733
59.00	42.79	323.47	193.39	15.825
60.00	43.50	328.80	196.58	15.914
61.00	44.20	334.13	199.77	16.002
62.00	44.90	339.46	202.96	16.089
63.00	45.61	344.78	206.14	16.174
64.00	46.31	350.09	209.33	16.258
65.00	47.01	355.41	212.51	16.340
66.00	47.71	360.72	215.69	16.421
67.00	48.41	366.03	218.86	16.501
68.00	49.11	371.33	222.04	16.580
69.00	49.81	376.63	225.21	16.657
70.00	50.51	381.93	228.39	16.733
71.00	51.21	387.23	231.56	16.808
72.00	51.91	392.52	234.73	16.882
73.00	52.61	397.81	237.90	16.955
74.00	53.31	403.10	241.06	17.027
75.00	54.00	408.39	244.23	17.098
76.00	54.70	413.67	247.39	17.168
77.00	55.40	418.95	250.55	17.237
78.00	56.09	424.23	253.72	17.306
79.00	56.79	429.51	256.88	17.373
80.00	57.49	434.79	260.04	17.439
81.00	58.18	440.06	263.20	17.505
82.00	58.88	445.34	266.35	17.569
83.00	59.57	450.61	269.51	17.633
84.00	60.27	455.88	272.67	17.696
85.00	60.96	461.14	275.82	17.759
86.00	61.66	466.41	278.98	17.820
87.00	62.35	471.68	282.13	17.881
88.00	63.05	476.94	285.28	17.941
89.00	63.74	482.20	288.43	18.001
90.00	64.44	487.46	291.58	18.060
91.00	65.13	492.72	294.73	18.118
92.00	65.82	497.98	297.88	18.175
93.00	66.52	503.23	301.03	18.232
94.00	67.21	508.49	304.18	18.288
95.00	67.90	513.74	307.33	18.344
96.00	68.60	519.00	310.47	18.399
97.00	69.29	524.25	313.62	18.453
98.00	69.98	529.50	316.77	18.507
99.00	70.67	534.75	319.91	18.560
100.00	71.37	540.00	323.06	18.613
101.00	72.06	545.24	326.20	18.665
102.00	72.75	550.49	329.34	18.717
103.00	73.44	555.74	332.49	18.768
104.00	74.13	560.98	335.63	18.819
105.00	74.83	566.23	338.77	18.869
106.00	75.52	571.47	341.91	18.919
107.00	76.21	576.71	345.05	18.968
108.00	76.90	581.95	348.19	19.017
109.00	77.59	587.19	351.33	19.065
110.00	78.28	592.43	354.47	19.113
111.00	78.97	597.67	357.61	19.160
112.00	79.66	602.91	360.75	19.207
113.00	80.35	608.15	363.89	19.254
114.00	81.04	613.38	367.03	19.300
115.00	81.73	618.62	370.16	19.346
116.00	82.42	623.85	373.30	19.391
117.00	83.11	629.09	376.44	19.436
118.00	83.80	634.32	379.58	19.480
119.00	84.49	639.56	382.71	19.525
120.00	85.18	644.79	385.85	19.568
121.00	85.87	650.02	388.98	19.612
122.00	86.56	655.25	392.12	19.655
123.00	87.25	660.48	395.25	19.698
124.00	87.94	665.71	398.39	19.740
125.00	88.63	670.94	401.52	19.782
126.00	89.32	676.17	404.66	19.824
127.00	90.01	681.40	407.79	19.865
128.00	90.70	686.63	410.92	19.906
129.00	91.39	691.86	414.06	19.947
130.00	92.08	697.09	417.19	19.987
131.00	92.77	702.31	420.32	20.027
132.00	93.45	707.54	423.45	20.067
133.00	94.14	712.76	426.59	20.106
134.00	94.83	717.99	429.72	20.145
135.00	95.52	723.21	432.85	20.184
136.00	96.21	728.44	435.98	20.223
137.00	96.90	733.66	439.11	20.261
138.00	97.59	738.89	442.24	20.299
139.00	98.27	744.11	445.38	20.337
140.00	98.96	749.33	448.51	20.374

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	99.65	754.55	451.64	20.411	221.00	154.57	1171.51	701.64	22.754
142.00	100.34	759.78	454.77	20.448	222.00	155.26	1176.72	704.76	22.777
143.00	101.03	765.00	457.90	20.485	223.00	155.94	1181.92	707.88	22.801
144.00	101.71	770.22	461.03	20.521	224.00	156.63	1187.13	711.00	22.824
145.00	102.40	775.44	464.16	20.557	225.00	157.31	1192.33	714.12	22.847
146.00	103.09	780.66	467.29	20.593	226.00	158.00	1197.54	717.24	22.870
147.00	103.78	785.88	470.41	20.629	227.00	158.69	1202.74	720.36	22.893
148.00	104.47	791.10	473.54	20.664	228.00	159.37	1207.95	723.49	22.916
149.00	105.15	796.32	476.67	20.699	229.00	160.06	1213.15	726.61	22.939
150.00	105.84	801.54	479.80	20.734	230.00	160.74	1218.35	729.73	22.962
151.00	106.53	806.76	482.93	20.769	231.00	161.43	1223.56	732.85	22.984
152.00	107.22	811.98	486.06	20.803	232.00	162.11	1228.76	735.97	23.007
153.00	107.90	817.19	489.19	20.838	233.00	162.80	1233.97	739.09	23.029
154.00	108.59	822.41	492.31	20.872	234.00	163.48	1239.17	742.21	23.051
155.00	109.28	827.63	495.44	20.905	235.00	164.17	1244.37	745.33	23.074
156.00	109.97	832.85	498.57	20.939	236.00	164.85	1249.58	748.45	23.096
157.00	110.65	838.06	501.70	20.972	237.00	165.54	1254.78	751.57	23.118
158.00	111.34	843.28	504.82	21.005	238.00	166.22	1259.99	754.70	23.140
159.00	112.03	848.50	507.95	21.038	239.00	166.91	1265.19	757.82	23.161
160.00	112.71	853.71	511.08	21.071	240.00	167.59	1270.39	760.94	23.183
161.00	113.40	858.93	514.21	21.104	241.00	168.28	1275.60	764.06	23.205
162.00	114.09	864.15	517.33	21.136	242.00	168.96	1280.80	767.18	23.226
163.00	114.78	869.36	520.46	21.168	243.00	169.65	1286.00	770.30	23.248
164.00	115.46	874.58	523.59	21.200	244.00	170.33	1291.21	773.42	23.269
165.00	116.15	879.79	526.71	21.232	245.00	171.02	1296.41	776.54	23.290
166.00	116.84	885.00	529.84	21.263	246.00	171.70	1301.61	779.66	23.312
167.00	117.52	890.22	532.97	21.294	247.00	172.39	1306.81	782.78	23.333
168.00	118.21	895.43	536.09	21.326	248.00	173.07	1312.02	785.90	23.354
169.00	118.90	900.65	539.22	21.356	249.00	173.76	1317.22	789.02	23.375
170.00	119.58	905.86	542.34	21.387	250.00	174.44	1322.42	792.14	23.396
171.00	120.27	911.07	545.47	21.418	251.00	175.13	1327.62	795.26	23.416
172.00	120.96	916.29	548.59	21.448	252.00	175.81	1332.83	798.38	23.437
173.00	121.64	921.50	551.72	21.478	253.00	176.50	1338.03	801.50	23.458
174.00	122.33	926.71	554.85	21.508	254.00	177.18	1343.23	804.62	23.478
175.00	123.02	931.92	557.97	21.538	255.00	177.87	1348.43	807.74	23.499
176.00	123.70	937.14	561.10	21.568	256.00	178.55	1353.64	810.86	23.519
177.00	124.39	942.35	564.22	21.598	257.00	179.24	1358.84	813.98	23.539
178.00	125.08	947.56	567.35	21.627	258.00	179.92	1364.04	817.10	23.559
179.00	125.76	952.77	570.47	21.656	259.00	180.61	1369.24	820.22	23.580
180.00	126.45	957.98	573.60	21.685	260.00	181.29	1374.44	823.34	23.600
181.00	127.14	963.20	576.72	21.714	261.00	181.98	1379.65	826.46	23.620
182.00	127.82	968.41	579.84	21.743	262.00	182.66	1384.85	829.58	23.639
183.00	128.51	973.62	582.97	21.771	263.00	183.35	1390.05	832.70	23.659
184.00	129.20	978.83	586.09	21.800	264.00	184.03	1395.25	835.82	23.679
185.00	129.88	984.04	589.22	21.828	265.00	184.72	1400.45	838.94	23.699
186.00	130.57	989.25	592.34	21.856	266.00	185.40	1405.65	842.06	23.718
187.00	131.26	994.46	595.47	21.884	267.00	186.09	1410.86	845.18	23.738
188.00	131.94	999.67	598.59	21.912	268.00	186.77	1416.06	848.30	23.757
189.00	132.63	1004.88	601.71	21.939	269.00	187.46	1421.26	851.42	23.777
190.00	133.31	1010.09	604.84	21.967	270.00	188.14	1426.46	854.54	23.796
191.00	134.00	1015.30	607.96	21.994	271.00	188.83	1431.66	857.66	23.815
192.00	134.69	1020.51	611.08	22.021	272.00	189.51	1436.86	860.78	23.834
193.00	135.37	1025.72	614.21	22.048	273.00	190.20	1442.06	863.90	23.853
194.00	136.06	1030.92	617.33	22.075	274.00	190.88	1447.26	867.01	23.872
195.00	136.74	1036.13	620.45	22.102	275.00	191.57	1452.46	870.13	23.891
196.00	137.43	1041.34	623.58	22.129	276.00	192.25	1457.67	873.25	23.910
197.00	138.12	1046.55	626.70	22.155	277.00	192.94	1462.87	876.37	23.929
198.00	138.80	1051.76	629.82	22.182	278.00	193.62	1468.07	879.49	23.948
199.00	139.49	1056.97	632.95	22.208	279.00	194.31	1473.27	882.61	23.966
200.00	140.17	1062.17	636.07	22.234	280.00	194.99	1478.47	885.73	23.985
201.00	140.86	1067.38	639.19	22.260	281.00	195.68	1483.67	888.85	24.004
202.00	141.55	1072.59	642.32	22.286	282.00	196.36	1488.87	891.97	24.022
203.00	142.23	1077.80	645.44	22.312	283.00	197.04	1494.07	895.09	24.040
204.00	142.92	1083.01	648.56	22.337	284.00	197.73	1499.27	898.21	24.059
205.00	143.60	1088.21	651.68	22.363	285.00	198.41	1504.47	901.33	24.077
206.00	144.29	1093.42	654.81	22.388	286.00	199.10	1509.67	904.45	24.095
207.00	144.97	1098.63	657.93	22.413	287.00	199.78	1514.87	907.56	24.113
208.00	145.66	1103.83	661.05	22.438	288.00	200.47	1520.07	910.68	24.132
209.00	146.35	1109.04	664.17	22.463	289.00	201.15	1525.27	913.80	24.150
210.00	147.03	1114.25	667.30	22.488	290.00	201.84	1530.47	916.92	24.167
211.00	147.72	1119.45	670.42	22.513	291.00	202.52	1535.67	920.04	24.185
212.00	148.40	1124.66	673.54	22.537	292.00	203.21	1540.87	923.16	24.203
213.00	149.09	1129.87	676.66	22.562	293.00	203.89	1546.07	926.28	24.221
214.00	149.77	1135.07	679.78	22.586	294.00	204.58	1551.27	929.40	24.239
215.00	150.46	1140.28	682.91	22.611	295.00	205.26	1556.47	932.52	24.256
216.00	151.15	1145.48	686.03	22.635	296.00	205.94	1561.67	935.63	24.274
217.00	151.83	1150.69	689.15	22.659	297.00	206.63	1566.87	938.75	24.292
218.00	152.52	1155.90	692.27	22.683	298.00	207.31	1572.07	941.87	24.309
219.00	153.20	1161.10	695.39	22.707	299.00	208.00	1577.27	944.99	24.326
220.00	153.89	1166.31	698.51	22.730	300.00	208.68	1582.47	948.11	24.344

35.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
					61.00	38.28	334.81	199.06	15.672
					62.00	38.88	340.15	202.26	15.759
					63.00	39.49	345.49	205.45	15.844
					64.00	40.09	350.82	208.64	15.928
					65.00	40.69	356.15	211.83	16.011
					66.00	41.30	361.47	215.02	16.092
					67.00	41.90	366.80	218.21	16.172
					68.00	42.50	372.11	221.39	16.251
					69.00	43.10	377.43	224.57	16.329
					70.00	43.70	382.74	227.75	16.405
					71.00	44.30	388.05	230.93	16.480
					72.00	44.90	393.35	234.11	16.555
					73.00	45.50	398.66	237.28	16.628
					74.00	46.10	403.96	240.45	16.700
					75.00	46.70	409.26	243.63	16.771
					76.00	47.30	414.55	246.80	16.841
					77.00	47.90	419.85	249.97	16.910
					78.00	48.50	425.14	253.13	16.979
					79.00	49.10	430.43	256.30	17.046
					80.00	49.70	435.71	259.47	17.113
					81.00	50.29	441.00	262.63	17.178
					82.00	50.89	446.28	265.80	17.243
3.00	5.52	24.73	5.17	1.709	83.00	51.49	451.56	268.96	17.307
4.00	5.63	26.58	6.63	2.263	84.00	52.09	456.84	272.12	17.370
5.00	5.77	28.90	8.45	2.800	85.00	52.68	462.12	275.28	17.433
6.00	5.94	31.69	10.61	3.304	86.00	53.28	467.39	278.44	17.494
7.00	6.16	34.79	12.93	3.786	87.00	53.88	472.67	281.60	17.555
8.00	6.43	38.51	15.71	4.282	88.00	54.47	477.94	284.75	17.616
9.00	6.75	42.98	19.06	4.808	89.00	55.07	483.21	287.91	17.675
10.00	7.11	47.97	22.75	5.333	90.00	55.67	488.48	291.07	17.734
11.00	7.53	53.34	26.65	5.845	91.00	56.26	493.75	294.22	17.792
12.00	7.99	58.99	30.65	6.336	92.00	56.86	499.02	297.38	17.850
13.00	8.50	64.84	34.70	6.804	93.00	57.45	504.28	300.53	17.907
14.00	9.04	70.83	38.75	7.248	94.00	58.05	509.54	303.68	17.963
15.00	9.62	76.90	42.78	7.666	95.00	58.64	514.81	306.83	18.019
16.00	10.22	83.00	46.76	8.060	96.00	59.24	520.07	309.98	18.074
17.00	10.84	89.11	50.68	8.431	97.00	59.83	525.33	313.14	18.128
18.00	11.46	95.21	54.55	8.780	98.00	60.43	530.59	316.28	18.182
19.00	12.10	101.28	58.37	9.108	99.00	61.02	535.84	319.43	18.236
20.00	12.74	107.32	62.13	9.417	100.00	61.62	541.10	322.58	18.288
21.00	13.39	113.31	65.84	9.710	101.00	62.21	546.35	325.73	18.341
22.00	14.03	119.27	69.50	9.987	102.00	62.80	551.61	328.88	18.393
23.00	14.68	125.18	73.13	10.250	103.00	63.40	556.86	332.02	18.444
24.00	15.32	131.05	76.71	10.500	104.00	63.99	562.11	335.17	18.495
25.00	15.97	136.89	80.27	10.738	105.00	64.58	567.36	338.32	18.545
26.00	16.61	142.69	83.79	10.965	106.00	65.18	572.61	341.46	18.595
27.00	17.25	148.46	87.28	11.183	107.00	65.77	577.86	344.61	18.644
28.00	17.89	154.20	90.75	11.392	108.00	66.36	583.11	347.75	18.693
29.00	18.53	159.91	94.20	11.592	109.00	66.96	588.36	350.89	18.741
30.00	19.16	165.59	97.63	11.785	110.00	67.55	593.60	354.04	18.789
31.00	19.80	171.25	101.04	11.971	111.00	68.14	598.85	357.18	18.836
32.00	20.43	176.89	104.43	12.149	112.00	68.74	604.09	360.32	18.883
33.00	21.06	182.50	107.81	12.322	113.00	69.33	609.34	363.46	18.930
34.00	21.69	188.10	111.17	12.489	114.00	69.92	614.58	366.60	18.976
35.00	22.32	193.67	114.52	12.651	115.00	70.51	619.82	369.74	19.022
36.00	22.95	199.23	117.86	12.808	116.00	71.11	625.06	372.88	19.067
37.00	23.57	204.78	121.18	12.959	117.00	71.70	630.30	376.02	19.112
38.00	24.19	210.31	124.50	13.107	118.00	72.29	635.54	379.16	19.157
39.00	24.82	215.82	127.81	13.250	119.00	72.88	640.78	382.30	19.201
40.00	25.44	221.32	131.10	13.389	120.00	73.48	646.02	385.44	19.245
41.00	26.06	226.81	134.39	13.525	121.00	74.07	651.26	388.58	19.288
42.00	26.68	232.29	137.68	13.657	122.00	74.66	656.49	391.72	19.332
43.00	27.30	237.75	140.95	13.785	123.00	75.25	661.73	394.86	19.374
44.00	27.91	243.21	144.22	13.911	124.00	75.84	666.97	397.99	19.417
45.00	28.53	248.65	147.48	14.033	125.00	76.43	672.20	401.13	19.459
46.00	29.14	254.09	150.74	14.153	126.00	77.03	677.44	404.27	19.500
47.00	29.76	259.52	153.99	14.270	127.00	77.62	682.67	407.40	19.542
48.00	30.37	264.94	157.23	14.384	128.00	78.21	687.90	410.54	19.583
49.00	30.98	270.35	160.47	14.495	129.00	78.80	693.14	413.68	19.624
50.00	31.59	275.76	163.71	14.604	130.00	79.39	698.37	416.81	19.664
51.00	32.20	281.15	166.94	14.711	131.00	79.98	703.60	419.95	19.704
52.00	32.81	286.55	170.17	14.816	132.00	80.57	708.83	423.08	19.744
53.00	33.42	291.93	173.39	14.919	133.00	81.16	714.06	426.22	19.783
54.00	34.03	297.31	176.61	15.019	134.00	81.75	719.29	429.35	19.823
55.00	34.64	302.68	179.83	15.118	135.00	82.35	724.52	432.49	19.861
56.00	35.25	308.05	183.04	15.214	136.00	82.94	729.75	435.62	19.900
57.00	35.86	313.41	186.25	15.309	137.00	83.53	734.98	438.75	19.938
58.00	36.46	318.77	189.46	15.403	138.00	84.12	740.21	441.89	19.976
59.00	37.07	324.12	192.66	15.494	139.00	84.71	745.43	445.02	20.014
60.00	37.67	329.47	195.86	15.584	140.00	85.30	750.66	448.15	20.052

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	85.89	755.89	451.28	20.089	221.00	133.00	1173.08	701.40	22.433
142.00	86.48	761.11	454.42	20.126	222.00	133.59	1178.28	704.52	22.456
143.00	87.07	766.34	457.55	20.162	223.00	134.17	1183.49	707.65	22.480
144.00	87.66	771.56	460.68	20.199	224.00	134.76	1188.70	710.77	22.503
145.00	88.25	776.79	463.81	20.235	225.00	135.35	1193.90	713.89	22.526
146.00	88.84	782.01	466.94	20.271	226.00	135.94	1199.11	717.01	22.549
147.00	89.43	787.24	470.08	20.306	227.00	136.52	1204.32	720.14	22.572
148.00	90.02	792.46	473.21	20.342	228.00	137.11	1209.52	723.26	22.595
149.00	90.61	797.69	476.34	20.377	229.00	137.70	1214.73	726.38	22.618
150.00	91.20	802.91	479.47	20.412	230.00	138.29	1219.94	729.50	22.640
151.00	91.79	808.13	482.60	20.447	231.00	138.88	1225.14	732.62	22.663
152.00	92.38	813.35	485.73	20.481	232.00	139.46	1230.35	735.75	22.686
153.00	92.97	818.57	488.86	20.515	233.00	140.05	1235.55	738.87	22.708
154.00	93.56	823.80	491.99	20.549	234.00	140.64	1240.76	741.99	22.730
155.00	94.15	829.02	495.12	20.583	235.00	141.23	1245.97	745.11	22.752
156.00	94.74	834.24	498.25	20.617	236.00	141.81	1251.17	748.23	22.775
157.00	95.33	839.46	501.38	20.650	237.00	142.40	1256.38	751.35	22.797
158.00	95.92	844.68	504.51	20.683	238.00	142.99	1261.58	754.48	22.818
159.00	96.51	849.90	507.64	20.716	239.00	143.58	1266.79	757.60	22.840
160.00	97.10	855.12	510.76	20.749	240.00	144.16	1271.99	760.72	22.862
161.00	97.69	860.34	513.89	20.781	241.00	144.75	1277.20	763.84	22.884
162.00	98.28	865.56	517.02	20.814	242.00	145.34	1282.40	766.96	22.905
163.00	98.87	870.78	520.15	20.846	243.00	145.93	1287.61	770.08	22.927
164.00	99.46	875.99	523.28	20.878	244.00	146.51	1292.81	773.20	22.948
165.00	100.04	881.21	526.41	20.910	245.00	147.10	1298.02	776.33	22.969
166.00	100.63	886.43	529.53	20.941	246.00	147.69	1303.22	779.45	22.991
167.00	101.22	891.65	532.66	20.972	247.00	148.28	1308.43	782.57	23.012
168.00	101.81	896.86	535.79	21.004	248.00	148.86	1313.63	785.69	23.033
169.00	102.40	902.08	538.92	21.035	249.00	149.45	1318.83	788.81	23.054
170.00	102.99	907.30	542.05	21.065	250.00	150.04	1324.04	791.93	23.074
171.00	103.58	912.51	545.17	21.096	251.00	150.63	1329.24	795.05	23.095
172.00	104.17	917.73	548.30	21.126	252.00	151.21	1334.45	798.17	23.116
173.00	104.76	922.95	551.43	21.157	253.00	151.80	1339.65	801.29	23.137
174.00	105.35	928.16	554.55	21.187	254.00	152.39	1344.85	804.41	23.157
175.00	105.94	933.38	557.68	21.216	255.00	152.98	1350.06	807.53	23.178
176.00	106.52	938.59	560.81	21.246	256.00	153.56	1355.26	810.66	23.198
177.00	107.11	943.81	563.93	21.276	257.00	154.15	1360.46	813.78	23.218
178.00	107.70	949.02	567.06	21.305	258.00	154.74	1365.67	816.90	23.238
179.00	108.29	954.24	570.19	21.334	259.00	155.32	1370.87	820.02	23.259
180.00	108.88	959.45	573.31	21.363	260.00	155.91	1376.08	823.14	23.279
181.00	109.47	964.67	576.44	21.392	261.00	156.50	1381.28	826.26	23.299
182.00	110.06	969.88	579.56	21.421	262.00	157.09	1386.48	829.38	23.318
183.00	110.65	975.09	582.69	21.450	263.00	157.67	1391.68	832.50	23.338
184.00	111.23	980.31	585.82	21.478	264.00	158.26	1396.89	835.62	23.358
185.00	111.82	985.52	588.94	21.506	265.00	158.85	1402.09	838.74	23.378
186.00	112.41	990.73	592.07	21.534	266.00	159.44	1407.29	841.86	23.397
187.00	113.00	995.94	595.19	21.562	267.00	160.02	1412.50	844.98	23.417
188.00	113.59	1001.16	598.32	21.590	268.00	160.61	1417.70	848.10	23.436
189.00	114.18	1006.37	601.44	21.618	269.00	161.20	1422.90	851.22	23.456
190.00	114.77	1011.58	604.57	21.645	270.00	161.78	1428.10	854.34	23.475
191.00	115.35	1016.79	607.69	21.673	271.00	162.37	1433.31	857.46	23.494
192.00	115.94	1022.01	610.82	21.700	272.00	162.96	1438.51	860.58	23.513
193.00	116.53	1027.22	613.94	21.727	273.00	163.55	1443.71	863.70	23.532
194.00	117.12	1032.43	617.07	21.754	274.00	164.13	1448.91	866.82	23.551
195.00	117.71	1037.64	620.19	21.781	275.00	164.72	1454.12	869.94	23.570
196.00	118.30	1042.85	623.32	21.807	276.00	165.31	1459.32	873.06	23.589
197.00	118.88	1048.06	626.44	21.834	277.00	165.89	1464.52	876.18	23.608
198.00	119.47	1053.27	629.56	21.860	278.00	166.48	1469.72	879.30	23.627
199.00	120.06	1058.48	632.69	21.886	279.00	167.07	1474.92	882.42	23.645
200.00	120.65	1063.69	635.81	21.913	280.00	167.66	1480.13	885.54	23.664
201.00	121.24	1068.90	638.94	21.939	281.00	168.24	1485.33	888.66	23.683
202.00	121.83	1074.11	642.06	21.964	282.00	168.83	1490.53	891.78	23.701
203.00	122.41	1079.32	645.18	21.990	283.00	169.42	1495.73	894.90	23.720
204.00	123.00	1084.53	648.31	22.016	284.00	170.00	1500.93	898.02	23.738
205.00	123.59	1089.74	651.43	22.041	285.00	170.59	1506.14	901.14	23.756
206.00	124.18	1094.95	654.56	22.067	286.00	171.18	1511.34	904.26	23.774
207.00	124.77	1100.16	657.68	22.092	287.00	171.76	1516.54	907.38	23.793
208.00	125.36	1105.37	660.80	22.117	288.00	172.35	1521.74	910.50	23.811
209.00	125.94	1110.58	663.93	22.142	289.00	172.94	1526.94	913.62	23.829
210.00	126.53	1115.79	667.05	22.167	290.00	173.53	1532.14	916.74	23.847
211.00	127.12	1121.00	670.17	22.191	291.00	174.11	1537.34	919.86	23.865
212.00	127.71	1126.21	673.30	22.216	292.00	174.70	1542.54	922.98	23.882
213.00	128.30	1131.41	676.42	22.241	293.00	175.29	1547.75	926.10	23.900
214.00	128.88	1136.62	679.54	22.265	294.00	175.87	1552.95	929.22	23.918
215.00	129.47	1141.83	682.66	22.289	295.00	176.46	1558.15	932.34	23.936
216.00	130.06	1147.04	685.79	22.313	296.00	177.05	1563.35	935.45	23.953
217.00	130.65	1152.25	688.91	22.338	297.00	177.63	1568.55	938.57	23.971
218.00	131.23	1157.45	692.03	22.361	298.00	178.22	1573.75	941.69	23.988
219.00	131.82	1162.66	695.16	22.385	299.00	178.81	1578.95	944.81	24.006
220.00	132.41	1167.87	698.28	22.409	300.00	179.40	1584.15	947.93	24.023

40.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.42	27.36	5.39	1.662
4.00	5.52	29.17	6.79	2.204
5.00	5.65	31.42	8.54	2.725
6.00	5.80	34.10	10.59	3.211
7.00	5.99	37.07	12.78	3.672
8.00	6.22	40.63	15.42	4.146
9.00	6.49	44.91	18.62	4.650
10.00	6.79	49.69	22.16	5.153
11.00	7.14	54.83	25.90	5.642
12.00	7.52	60.24	29.76	6.113
13.00	7.94	65.85	33.69	6.562
14.00	8.38	71.62	37.64	6.990
15.00	8.86	77.50	41.59	7.395
16.00	9.36	83.44	45.51	7.779
17.00	9.87	89.43	49.40	8.141
18.00	10.41	95.43	53.25	8.484
19.00	10.95	101.43	57.06	8.809
20.00	11.49	107.41	60.82	9.116
21.00	12.05	113.37	64.54	9.407
22.00	12.60	119.31	68.22	9.683
23.00	13.16	125.21	71.87	9.945
24.00	13.72	131.09	75.47	10.195
25.00	14.28	136.93	79.05	10.434
26.00	14.84	142.75	82.59	10.662
27.00	15.40	148.53	86.11	10.880
28.00	15.96	154.29	89.60	11.090
29.00	16.52	160.02	93.07	11.291
30.00	17.07	165.72	96.52	11.484
31.00	17.63	171.40	99.95	11.670
32.00	18.18	177.06	103.36	11.850
33.00	18.74	182.70	106.76	12.024
34.00	19.29	188.32	110.14	12.191
35.00	19.84	193.92	113.51	12.354
36.00	20.39	199.50	116.87	12.511
37.00	20.94	205.07	120.21	12.663
38.00	21.48	210.62	123.54	12.811
39.00	22.03	216.15	126.87	12.955
40.00	22.57	221.68	130.18	13.095
41.00	23.12	227.19	133.48	13.231
42.00	23.66	232.69	136.78	13.364
43.00	24.20	238.17	140.07	13.493
44.00	24.75	243.65	143.35	13.619
45.00	25.29	249.12	146.63	13.741
46.00	25.83	254.57	149.90	13.861
47.00	26.36	260.02	153.16	13.979
48.00	26.90	265.46	156.42	14.093
49.00	27.44	270.89	159.67	14.205
50.00	27.98	276.31	162.92	14.315
51.00	28.51	281.73	166.16	14.422
52.00	29.05	287.14	169.40	14.527
53.00	29.58	292.54	172.64	14.630
54.00	30.12	297.93	175.87	14.731
55.00	30.65	303.32	179.09	14.829
56.00	31.18	308.71	182.31	14.926
57.00	31.72	314.08	185.53	15.022
58.00	32.25	319.46	188.75	15.115
59.00	32.78	324.82	191.96	15.207
60.00	33.31	330.19	195.17	15.297
61.00	33.84	335.55	198.38	15.386
62.00	34.37	340.90	201.59	15.473
63.00	34.90	346.25	204.79	15.558
64.00	35.43	351.59	207.99	15.642
65.00	35.96	356.93	211.18	15.725
66.00	36.49	362.27	214.38	15.807
67.00	37.02	367.61	217.57	15.887
68.00	37.54	372.94	220.76	15.966
69.00	38.07	378.26	223.95	16.044
70.00	38.60	383.59	227.14	16.120
71.00	39.13	388.91	230.32	16.196
72.00	39.65	394.22	233.51	16.270
73.00	40.18	399.54	236.69	16.343
74.00	40.71	404.85	239.87	16.416
75.00	41.23	410.16	243.05	16.487
76.00	41.76	415.47	246.22	16.557
77.00	42.28	420.77	249.40	16.627
78.00	42.81	426.07	252.57	16.695
79.00	43.33	431.37	255.74	16.762
80.00	43.86	436.67	258.92	16.829
81.00	44.38	441.96	262.09	16.895
82.00	44.90	447.26	265.25	16.960
83.00	45.43	452.55	268.42	17.024
84.00	45.95	457.83	271.59	17.087
85.00	46.47	463.12	274.75	17.150
86.00	47.00	468.40	277.92	17.212
87.00	47.52	473.69	281.08	17.273
88.00	48.04	478.97	284.24	17.333
89.00	48.57	484.25	287.40	17.393
90.00	49.09	489.53	290.56	17.452
91.00	49.61	494.80	293.72	17.510
92.00	50.13	500.08	296.88	17.568
93.00	50.65	505.35	300.04	17.625
94.00	51.18	510.62	303.20	17.681
95.00	51.70	515.89	306.35	17.737
96.00	52.22	521.16	309.51	17.792
97.00	52.74	526.43	312.66	17.846
98.00	53.26	531.69	315.82	17.901
99.00	53.78	536.96	318.97	17.954
100.00	54.30	542.22	322.12	18.007
101.00	54.82	547.48	325.27	18.059
102.00	55.34	552.74	328.42	18.111
103.00	55.86	558.00	331.57	18.162
104.00	56.39	563.26	334.72	18.213
105.00	56.91	568.52	337.87	18.263
106.00	57.43	573.77	341.02	18.313
107.00	57.95	579.03	344.17	18.363
108.00	58.47	584.28	347.32	18.412
109.00	58.98	589.54	350.46	18.460
110.00	59.50	594.79	353.61	18.508
111.00	60.02	600.04	356.76	18.555
112.00	60.54	605.29	359.90	18.603
113.00	61.06	610.54	363.05	18.649
114.00	61.58	615.79	366.19	18.695
115.00	62.10	621.04	369.33	18.741
116.00	62.62	626.28	372.48	18.787
117.00	63.14	631.53	375.62	18.832
118.00	63.66	636.77	378.76	18.876
119.00	64.18	642.02	381.91	18.921
120.00	64.69	647.26	385.05	18.964
121.00	65.21	652.51	388.19	19.008
122.00	65.73	657.75	391.33	19.051
123.00	66.25	662.99	394.47	19.094
124.00	66.77	668.23	397.61	19.136
125.00	67.29	673.47	400.75	19.178
126.00	67.80	678.71	403.89	19.220
127.00	68.32	683.95	407.03	19.262
128.00	68.84	689.19	410.17	19.303
129.00	69.36	694.42	413.30	19.343
130.00	69.88	699.66	416.44	19.384
131.00	70.39	704.90	419.58	19.424
132.00	70.91	710.13	422.72	19.464
133.00	71.43	715.37	425.85	19.503
134.00	71.95	720.60	428.99	19.543
135.00	72.46	725.84	432.13	19.581
136.00	72.98	731.07	435.26	19.620
137.00	73.50	736.30	438.40	19.658
138.00	74.02	741.53	441.53	19.696
139.00	74.53	746.77	444.67	19.734
140.00	75.05	752.00	447.81	19.772

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	75.57	757.23	450.94	19.809	221.00	116.82	1174.64	701.17	22.154
142.00	76.09	762.46	454.07	19.846	222.00	117.33	1179.85	704.29	22.178
143.00	76.60	767.69	457.21	19.883	223.00	117.85	1185.06	707.42	22.201
144.00	77.12	772.92	460.34	19.919	224.00	118.36	1190.27	710.54	22.224
145.00	77.64	778.15	463.48	19.955	225.00	118.88	1195.48	713.66	22.248
146.00	78.15	783.37	466.61	19.991	226.00	119.39	1200.69	716.79	22.271
147.00	78.67	788.60	469.74	20.027	227.00	119.90	1205.89	719.91	22.294
148.00	79.19	793.83	472.88	20.062	228.00	120.42	1211.10	723.03	22.317
149.00	79.70	799.06	476.01	20.098	229.00	120.93	1216.31	726.16	22.339
150.00	80.22	804.28	479.14	20.133	230.00	121.45	1221.52	729.28	22.362
151.00	80.74	809.51	482.27	20.167	231.00	121.96	1226.73	732.40	22.385
152.00	81.25	814.74	485.41	20.202	232.00	122.48	1231.93	735.52	22.407
153.00	81.77	819.96	488.54	20.236	233.00	122.99	1237.14	738.65	22.430
154.00	82.29	825.19	491.67	20.270	234.00	123.51	1242.35	741.77	22.452
155.00	82.80	830.41	494.80	20.304	235.00	124.02	1247.56	744.89	22.474
156.00	83.32	835.64	497.93	20.337	236.00	124.53	1252.76	748.01	22.496
157.00	83.84	840.86	501.06	20.371	237.00	125.05	1257.97	751.14	22.518
158.00	84.35	846.08	504.19	20.404	238.00	125.56	1263.18	754.26	22.540
159.00	84.87	851.31	507.33	20.437	239.00	126.08	1268.39	757.38	22.562
160.00	85.38	856.53	510.46	20.470	240.00	126.59	1273.59	760.50	22.584
161.00	85.90	861.75	513.59	20.502	241.00	127.11	1278.80	763.63	22.605
162.00	86.42	866.97	516.72	20.535	242.00	127.62	1284.01	766.75	22.627
163.00	86.93	872.20	519.85	20.567	243.00	128.13	1289.21	769.87	22.648
164.00	87.45	877.42	522.98	20.599	244.00	128.65	1294.42	772.99	22.670
165.00	87.97	882.64	526.11	20.630	245.00	129.16	1299.62	776.11	22.691
166.00	88.48	887.86	529.24	20.662	246.00	129.68	1304.83	779.24	22.712
167.00	89.00	893.08	532.37	20.693	247.00	130.19	1310.04	782.36	22.733
168.00	89.51	898.30	535.49	20.724	248.00	130.71	1315.24	785.48	22.754
169.00	90.03	903.52	538.62	20.755	249.00	131.22	1320.45	788.60	22.775
170.00	90.55	908.74	541.75	20.786	250.00	131.73	1325.65	791.72	22.796
171.00	91.06	913.96	544.88	20.817	251.00	132.25	1330.86	794.85	22.817
172.00	91.58	919.18	548.01	20.847	252.00	132.76	1336.07	797.97	22.838
173.00	92.09	924.40	551.14	20.878	253.00	133.28	1341.27	801.09	22.858
174.00	92.61	929.62	554.27	20.908	254.00	133.79	1346.48	804.21	22.879
175.00	93.12	934.84	557.39	20.938	255.00	134.30	1351.68	807.33	22.899
176.00	93.64	940.05	560.52	20.967	256.00	134.82	1356.89	810.45	22.920
177.00	94.16	945.27	563.65	20.997	257.00	135.33	1362.09	813.57	22.940
178.00	94.67	950.49	566.78	21.026	258.00	135.85	1367.30	816.70	22.960
179.00	95.19	955.71	569.91	21.055	259.00	136.36	1372.50	819.82	22.980
180.00	95.70	960.92	573.03	21.084	260.00	136.87	1377.71	822.94	23.000
181.00	96.22	966.14	576.16	21.113	261.00	137.39	1382.91	826.06	23.020
182.00	96.73	971.36	579.29	21.142	262.00	137.90	1388.12	829.18	23.040
183.00	97.25	976.57	582.42	21.171	263.00	138.42	1393.32	832.30	23.060
184.00	97.76	981.79	585.54	21.199	264.00	138.93	1398.53	835.42	23.080
185.00	98.28	987.00	588.67	21.227	265.00	139.44	1403.73	838.54	23.100
186.00	98.79	992.22	591.80	21.256	266.00	139.96	1408.93	841.66	23.119
187.00	99.31	997.44	594.92	21.283	267.00	140.47	1414.14	844.79	23.139
188.00	99.82	1002.65	598.05	21.311	268.00	140.99	1419.34	847.91	23.158
189.00	100.34	1007.87	601.18	21.339	269.00	141.50	1424.55	851.03	23.177
190.00	100.86	1013.08	604.30	21.366	270.00	142.01	1429.75	854.15	23.197
191.00	101.37	1018.29	607.43	21.394	271.00	142.53	1434.95	857.27	23.216
192.00	101.89	1023.51	610.55	21.421	272.00	143.04	1440.16	860.39	23.235
193.00	102.40	1028.72	613.68	21.448	273.00	143.56	1445.36	863.51	23.254
194.00	102.92	1033.94	616.81	21.475	274.00	144.07	1450.57	866.63	23.273
195.00	103.43	1039.15	619.93	21.502	275.00	144.58	1455.77	869.75	23.292
196.00	103.95	1044.36	623.06	21.529	276.00	145.10	1460.97	872.87	23.311
197.00	104.46	1049.58	626.18	21.555	277.00	145.61	1466.18	875.99	23.330
198.00	104.98	1054.79	629.31	21.582	278.00	146.13	1471.38	879.11	23.349
199.00	105.49	1060.00	632.43	21.608	279.00	146.64	1476.58	882.23	23.367
200.00	106.01	1065.22	635.56	21.634	280.00	147.15	1481.79	885.35	23.386
201.00	106.52	1070.43	638.68	21.660	281.00	147.67	1486.99	888.48	23.405
202.00	107.04	1075.64	641.81	21.686	282.00	148.18	1492.19	891.60	23.423
203.00	107.55	1080.85	644.93	21.712	283.00	148.70	1497.39	894.72	23.441
204.00	108.07	1086.06	648.06	21.737	284.00	149.21	1502.60	897.84	23.460
205.00	108.58	1091.28	651.18	21.763	285.00	149.72	1507.80	900.96	23.478
206.00	109.10	1096.49	654.31	21.788	286.00	150.24	1513.00	904.08	23.496
207.00	109.61	1101.70	657.43	21.813	287.00	150.75	1518.21	907.20	23.515
208.00	110.13	1106.91	660.56	21.838	288.00	151.26	1523.41	910.32	23.533
209.00	110.64	1112.12	663.68	21.863	289.00	151.78	1528.61	913.44	23.551
210.00	111.16	1117.33	666.81	21.888	290.00	152.29	1533.81	916.56	23.569
211.00	111.67	1122.54	669.93	21.913	291.00	152.81	1539.02	919.68	23.587
212.00	112.19	1127.75	673.06	21.938	292.00	153.32	1544.22	922.80	23.604
213.00	112.70	1132.96	676.18	21.962	293.00	153.83	1549.42	925.92	23.622
214.00	113.21	1138.17	679.30	21.986	294.00	154.35	1554.62	929.04	23.640
215.00	113.73	1143.38	682.43	22.011	295.00	154.86	1559.82	932.16	23.658
216.00	114.24	1148.59	685.55	22.035	296.00	155.37	1565.03	935.28	23.675
217.00	114.76	1153.80	688.68	22.059	297.00	155.89	1570.23	938.40	23.693
218.00	115.27	1159.01	691.80	22.083	298.00	156.40	1575.43	941.52	23.710
219.00	115.79	1164.22	694.92	22.107	299.00	156.92	1580.63	944.64	23.728
220.00	116.30	1169.43	698.05	22.131	300.00	157.43	1585.83	947.76	23.745

45.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.33	29.95	5.63	1.617
4.00	5.43	31.73	6.98	2.150
5.00	5.54	33.92	8.66	2.659
6.00	5.68	36.51	10.62	3.128
7.00	5.85	39.37	12.71	3.573
8.00	6.05	42.80	15.23	4.030
9.00	6.28	46.93	18.31	4.515
10.00	6.54	51.54	21.72	5.001
11.00	6.83	56.50	25.34	5.473
12.00	7.16	61.72	29.08	5.927
13.00	7.51	67.14	32.90	6.361
14.00	7.89	72.72	36.76	6.774
15.00	8.29	78.42	40.62	7.168
16.00	8.71	84.21	44.49	7.541
17.00	9.15	90.07	48.33	7.896
18.00	9.61	95.96	52.15	8.233
19.00	10.07	101.87	55.93	8.552
20.00	10.55	107.78	59.68	8.856
21.00	11.03	113.69	63.40	9.144
22.00	11.52	119.59	67.08	9.419
23.00	12.01	125.47	70.73	9.680
24.00	12.50	131.33	74.35	9.929
25.00	12.99	137.17	77.94	10.168
26.00	13.48	142.98	81.49	10.396
27.00	13.98	148.77	85.03	10.614
28.00	14.47	154.53	88.54	10.824
29.00	14.97	160.27	92.02	11.025
30.00	15.46	165.99	95.49	11.219
31.00	15.95	171.69	98.94	11.406
32.00	16.45	177.36	102.36	11.586
33.00	16.94	183.02	105.78	11.760
34.00	17.43	188.65	109.18	11.928
35.00	17.92	194.27	112.56	12.091
36.00	18.41	199.87	115.93	12.249
37.00	18.90	205.45	119.29	12.402
38.00	19.38	211.02	122.64	12.550
39.00	19.87	216.58	125.98	12.694
40.00	20.36	222.12	129.30	12.835
41.00	20.84	227.65	132.62	12.971
42.00	21.32	233.17	135.93	13.104
43.00	21.81	238.67	139.24	13.234
44.00	22.29	244.16	142.53	13.360
45.00	22.77	249.65	145.82	13.483
46.00	23.25	255.12	149.10	13.604
47.00	23.73	260.59	152.37	13.721
48.00	24.21	266.04	155.64	13.836
49.00	24.69	271.49	158.91	13.948
50.00	25.17	276.93	162.16	14.058
51.00	25.65	282.36	165.42	14.166
52.00	26.12	287.78	168.67	14.271
53.00	26.60	293.20	171.91	14.374
54.00	27.08	298.61	175.15	14.475
55.00	27.55	304.01	178.39	14.575
56.00	28.03	309.41	181.62	14.672
57.00	28.50	314.80	184.85	14.767
58.00	28.98	320.19	188.07	14.861
59.00	29.45	325.57	191.29	14.953
60.00	29.92	330.95	194.51	15.043
61.00	30.40	336.32	197.73	15.132
62.00	30.87	341.69	200.94	15.219
63.00	31.34	347.05	204.15	15.305
64.00	31.81	352.41	207.35	15.389
65.00	32.28	357.76	210.56	15.472
66.00	32.75	363.11	213.76	15.554
67.00	33.22	368.45	216.96	15.635
68.00	33.69	373.79	220.16	15.714
69.00	34.16	379.13	223.35	15.792
70.00	34.63	384.47	226.55	15.868
71.00	35.10	389.80	229.74	15.944
72.00	35.57	395.13	232.93	16.018
73.00	36.04	400.45	236.11	16.092
74.00	36.51	405.77	239.30	16.164
75.00	36.98	411.09	242.48	16.236
76.00	37.45	416.41	245.67	16.306
77.00	37.91	421.72	248.85	16.376
78.00	38.38	427.03	252.03	16.444
79.00	38.85	432.34	255.20	16.512
80.00	39.32	437.65	258.38	16.579
81.00	39.78	442.95	261.56	16.644
82.00	40.25	448.25	264.73	16.709
83.00	40.72	453.55	267.90	16.774
84.00	41.18	458.85	271.07	16.837
85.00	41.65	464.15	274.24	16.900
86.00	42.11	469.44	277.41	16.962
87.00	42.58	474.73	280.58	17.023
88.00	43.04	480.02	283.75	17.083
89.00	43.51	485.31	286.91	17.143
90.00	43.97	490.59	290.08	17.202
91.00	44.44	495.87	293.24	17.261
92.00	44.90	501.16	296.40	17.318
93.00	45.37	506.44	299.56	17.375
94.00	45.83	511.72	302.73	17.432
95.00	46.30	516.99	305.89	17.488
96.00	46.76	522.27	309.04	17.543
97.00	47.23	527.54	312.20	17.598
98.00	47.69	532.81	315.36	17.652
99.00	48.15	538.09	318.52	17.705
100.00	48.62	543.36	321.67	17.758
101.00	49.08	548.62	324.83	17.810
102.00	49.54	553.89	327.98	17.862
103.00	50.01	559.16	331.14	17.914
104.00	50.47	564.42	334.29	17.965
105.00	50.93	569.69	337.44	18.015
106.00	51.40	574.95	340.59	18.065
107.00	51.86	580.21	343.75	18.114
108.00	52.32	585.47	346.90	18.163
109.00	52.78	590.73	350.05	18.212
110.00	53.25	595.99	353.20	18.260
111.00	53.71	601.25	356.34	18.307
112.00	54.17	606.50	359.49	18.354
113.00	54.63	611.76	362.64	18.401
114.00	55.10	617.01	365.79	18.447
115.00	55.56	622.26	368.93	18.493
116.00	56.02	627.52	372.08	18.539
117.00	56.48	632.77	375.23	18.584
118.00	56.94	638.02	378.37	18.629
119.00	57.40	643.27	381.52	18.673
120.00	57.87	648.52	384.66	18.717
121.00	58.33	653.76	387.80	18.760
122.00	58.79	659.01	390.95	18.804
123.00	59.25	664.26	394.09	18.846
124.00	59.71	669.50	397.23	18.889
125.00	60.17	674.75	400.38	18.931
126.00	60.63	679.99	403.52	18.973
127.00	61.10	685.24	406.66	19.014
128.00	61.56	690.48	409.80	19.055
129.00	62.02	695.72	412.94	19.096
130.00	62.48	700.96	416.08	19.137
131.00	62.94	706.20	419.22	19.177
132.00	63.40	711.44	422.36	19.217
133.00	63.86	716.68	425.50	19.256
134.00	64.32	721.92	428.64	19.295
135.00	64.78	727.16	431.78	19.334
136.00	65.24	732.40	434.92	19.373
137.00	65.70	737.63	438.05	19.411
138.00	66.16	742.87	441.19	19.449
139.00	66.62	748.11	444.33	19.487
140.00	67.08	753.34	447.47	19.525

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	67.54	758.58	450.60	19.562	221.00	104.23	1176.21	700.94	21.908
142.00	68.00	763.81	453.74	19.599	222.00	104.69	1181.42	704.07	21.932
143.00	68.46	769.04	456.87	19.636	223.00	105.15	1186.63	707.19	21.955
144.00	68.92	774.28	460.01	19.672	224.00	105.60	1191.84	710.31	21.979
145.00	69.38	779.51	463.15	19.708	225.00	106.06	1197.05	713.44	22.002
146.00	69.84	784.74	466.28	19.744	226.00	106.52	1202.26	716.56	22.025
147.00	70.30	789.97	469.42	19.780	227.00	106.98	1207.47	719.69	22.048
148.00	70.76	795.21	472.55	19.816	228.00	107.43	1212.68	722.81	22.071
149.00	71.22	800.44	475.69	19.851	229.00	107.89	1217.89	725.93	22.094
150.00	71.68	805.67	478.82	19.886	230.00	108.35	1223.10	729.06	22.116
151.00	72.14	810.90	481.95	19.921	231.00	108.81	1228.31	732.18	22.139
152.00	72.60	816.13	485.09	19.955	232.00	109.26	1233.52	735.30	22.162
153.00	73.06	821.36	488.22	19.989	233.00	109.72	1238.73	738.43	22.184
154.00	73.52	826.58	491.36	20.023	234.00	110.18	1243.94	741.55	22.206
155.00	73.98	831.81	494.49	20.057	235.00	110.64	1249.15	744.68	22.228
156.00	74.44	837.04	497.62	20.091	236.00	111.09	1254.36	747.80	22.251
157.00	74.90	842.27	500.76	20.124	237.00	111.55	1259.57	750.92	22.273
158.00	75.36	847.49	503.89	20.157	238.00	112.01	1264.78	754.04	22.295
159.00	75.82	852.72	507.02	20.190	239.00	112.47	1269.99	757.17	22.316
160.00	76.27	857.95	510.15	20.223	240.00	112.92	1275.19	760.29	22.338
161.00	76.73	863.17	513.28	20.256	241.00	113.38	1280.40	763.41	22.360
162.00	77.19	868.40	516.42	20.288	242.00	113.84	1285.61	766.54	22.381
163.00	77.65	873.62	519.55	20.320	243.00	114.30	1290.82	769.66	22.403
164.00	78.11	878.85	522.68	20.352	244.00	114.75	1296.03	772.78	22.424
165.00	78.57	884.07	525.81	20.384	245.00	115.21	1301.23	775.91	22.446
166.00	79.03	889.30	528.94	20.416	246.00	115.67	1306.44	779.03	22.467
167.00	79.49	894.52	532.07	20.447	247.00	116.12	1311.65	782.15	22.488
168.00	79.95	899.74	535.20	20.478	248.00	116.58	1316.86	785.27	22.509
169.00	80.41	904.97	538.33	20.509	249.00	117.04	1322.06	788.40	22.530
170.00	80.87	910.19	541.46	20.540	250.00	117.50	1327.27	791.52	22.551
171.00	81.32	915.41	544.59	20.571	251.00	117.95	1332.48	794.64	22.572
172.00	81.78	920.63	547.72	20.601	252.00	118.41	1337.69	797.76	22.592
173.00	82.24	925.86	550.85	20.631	253.00	118.87	1342.89	800.89	22.613
174.00	82.70	931.08	553.98	20.661	254.00	119.33	1348.10	804.01	22.633
175.00	83.16	936.30	557.11	20.691	255.00	119.78	1353.31	807.13	22.654
176.00	83.62	941.52	560.24	20.721	256.00	120.24	1358.51	810.25	22.674
177.00	84.08	946.74	563.37	20.751	257.00	120.70	1363.72	813.37	22.695
178.00	84.53	951.96	566.50	20.780	258.00	121.15	1368.93	816.50	22.715
179.00	84.99	957.18	569.63	20.809	259.00	121.61	1374.13	819.62	22.735
180.00	85.45	962.40	572.76	20.838	260.00	122.07	1379.34	822.74	22.755
181.00	85.91	967.62	575.89	20.867	261.00	122.52	1384.54	825.86	22.775
182.00	86.37	972.84	579.02	20.896	262.00	122.98	1389.75	828.98	22.795
183.00	86.83	978.06	582.15	20.925	263.00	123.44	1394.96	832.11	22.815
184.00	87.29	983.27	585.27	20.953	264.00	123.90	1400.16	835.23	22.834
185.00	87.74	988.49	588.40	20.981	265.00	124.35	1405.37	838.35	22.854
186.00	88.20	993.71	591.53	21.009	266.00	124.81	1410.57	841.47	22.874
187.00	88.66	998.93	594.66	21.037	267.00	125.27	1415.78	844.59	22.893
188.00	89.12	1004.15	597.79	21.065	268.00	125.72	1420.99	847.71	22.913
189.00	89.58	1009.36	600.91	21.093	269.00	126.18	1426.19	850.84	22.932
190.00	90.04	1014.58	604.04	21.120	270.00	126.64	1431.40	853.96	22.951
191.00	90.49	1019.80	607.17	21.148	271.00	127.10	1436.60	857.08	22.971
192.00	90.95	1025.01	610.30	21.175	272.00	127.55	1441.81	860.20	22.990
193.00	91.41	1030.23	613.42	21.202	273.00	128.01	1447.01	863.32	23.009
194.00	91.87	1035.45	616.55	21.229	274.00	128.47	1452.22	866.44	23.028
195.00	92.33	1040.66	619.68	21.256	275.00	128.92	1457.42	869.56	23.047
196.00	92.79	1045.88	622.80	21.283	276.00	129.38	1462.63	872.69	23.066
197.00	93.24	1051.09	625.93	21.309	277.00	129.84	1467.83	875.81	23.085
198.00	93.70	1056.31	629.06	21.336	278.00	130.29	1473.04	878.93	23.103
199.00	94.16	1061.53	632.18	21.362	279.00	130.75	1478.24	882.05	23.122
200.00	94.62	1066.74	635.31	21.388	280.00	131.21	1483.44	885.17	23.141
201.00	95.08	1071.95	638.44	21.414	281.00	131.66	1488.65	888.29	23.159
202.00	95.53	1077.17	641.56	21.440	282.00	132.12	1493.85	891.41	23.178
203.00	95.99	1082.38	644.69	21.466	283.00	132.58	1499.06	894.53	23.196
204.00	96.45	1087.60	647.81	21.491	284.00	133.04	1504.26	897.65	23.215
205.00	96.91	1092.81	650.94	21.517	285.00	133.49	1509.47	900.77	23.233
206.00	97.37	1098.03	654.07	21.542	286.00	133.95	1514.67	903.90	23.251
207.00	97.82	1103.24	657.19	21.567	287.00	134.41	1519.87	907.02	23.269
208.00	98.28	1108.45	660.32	21.592	288.00	134.86	1525.08	910.14	23.287
209.00	98.74	1113.67	663.44	21.617	289.00	135.32	1530.28	913.26	23.305
210.00	99.20	1118.88	666.57	21.642	290.00	135.78	1535.48	916.38	23.323
211.00	99.65	1124.09	669.69	21.667	291.00	136.23	1540.69	919.50	23.341
212.00	100.11	1129.30	672.82	21.692	292.00	136.69	1545.89	922.62	23.359
213.00	100.57	1134.52	675.94	21.716	293.00	137.15	1551.09	925.74	23.377
214.00	101.03	1139.73	679.07	21.741	294.00	137.60	1556.30	928.86	23.395
215.00	101.49	1144.94	682.19	21.765	295.00	138.06	1561.50	931.98	23.412
216.00	101.94	1150.15	685.32	21.789	296.00	138.52	1566.70	935.10	23.430
217.00	102.40	1155.36	688.44	21.813	297.00	138.97	1571.91	938.22	23.447
218.00	102.86	1160.58	691.57	21.837	298.00	139.43	1577.11	941.34	23.465
219.00	103.32	1165.79	694.69	21.861	299.00	139.89	1582.31	944.46	23.482
220.00	103.77	1171.00	697.82	21.885	300.00	140.34	1587.52	947.58	23.500

50.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.26	32.51	5.88	1.576
4.00	5.34	34.25	7.19	2.100
5.00	5.45	36.40	8.81	2.598
6.00	5.57	38.92	10.69	3.054
7.00	5.72	41.69	12.69	3.485
8.00	5.90	45.01	15.11	3.927
9.00	6.10	49.01	18.09	4.398
10.00	6.33	53.49	21.39	4.869
11.00	6.59	58.30	24.91	5.327
12.00	6.87	63.36	28.55	5.768
13.00	7.17	68.62	32.28	6.189
14.00	7.50	74.05	36.05	6.591
15.00	7.85	79.59	39.84	6.973
16.00	8.21	85.24	43.64	7.338
17.00	8.59	90.96	47.43	7.685
18.00	8.99	96.74	51.21	8.015
19.00	9.39	102.56	54.96	8.329
20.00	9.81	108.39	58.69	8.629
21.00	10.23	114.24	62.40	8.914
22.00	10.66	120.09	66.07	9.186
23.00	11.10	125.93	69.72	9.446
24.00	11.53	131.76	73.34	9.694
25.00	11.97	137.58	76.93	9.931
26.00	12.41	143.38	80.49	10.159
27.00	12.85	149.16	84.04	10.377
28.00	13.30	154.92	87.56	10.587
29.00	13.74	160.66	91.05	10.788
30.00	14.18	166.39	94.53	10.982
31.00	14.63	172.09	97.99	11.169
32.00	15.07	177.77	101.43	11.350
33.00	15.51	183.44	104.86	11.524
34.00	15.95	189.09	108.27	11.692
35.00	16.39	194.72	111.67	11.856
36.00	16.83	200.33	115.05	12.014
37.00	17.27	205.93	118.43	12.167
38.00	17.71	211.51	121.79	12.316
39.00	18.15	217.08	125.14	12.461
40.00	18.59	222.64	128.48	12.602
41.00	19.02	228.18	131.81	12.738
42.00	19.46	233.72	135.13	12.872
43.00	19.89	239.24	138.44	13.002
44.00	20.33	244.75	141.75	13.128
45.00	20.76	250.24	145.05	13.252
46.00	21.20	255.73	148.34	13.373
47.00	21.63	261.21	151.62	13.490
48.00	22.06	266.68	154.90	13.606
49.00	22.50	272.14	158.17	13.718
50.00	22.93	277.60	161.44	13.828
51.00	23.36	283.04	164.71	13.936
52.00	23.79	288.48	167.96	14.042
53.00	24.22	293.91	171.22	14.145
54.00	24.65	299.33	174.46	14.247
55.00	25.08	304.75	177.71	14.346
56.00	25.50	310.16	180.95	14.443
57.00	25.93	315.57	184.18	14.539
58.00	26.36	320.97	187.42	14.633
59.00	26.79	326.36	190.65	14.725
60.00	27.21	331.75	193.87	14.816
61.00	27.64	337.13	197.09	14.905
62.00	28.07	342.51	200.31	14.992
63.00	28.49	347.88	203.53	15.078
64.00	28.92	353.25	206.74	15.163
65.00	29.34	358.62	209.95	15.246
66.00	29.77	363.98	213.16	15.328
67.00	30.19	369.33	216.37	15.408
68.00	30.62	374.69	219.57	15.488
69.00	31.04	380.03	222.77	15.566
70.00	31.46	385.38	225.97	15.643
71.00	31.89	390.72	229.17	15.718
72.00	32.31	396.06	232.37	15.793
73.00	32.73	401.39	235.56	15.867
74.00	33.15	406.72	238.75	15.939
75.00	33.58	412.05	241.94	16.011
76.00	34.00	417.38	245.13	16.081
77.00	34.42	422.70	248.31	16.151
78.00	34.84	428.02	251.50	16.219
79.00	35.26	433.34	254.68	16.287
80.00	35.68	438.65	257.86	16.354
81.00	36.11	443.97	261.04	16.420
82.00	36.53	449.28	264.22	16.485
83.00	36.95	454.58	267.40	16.549
84.00	37.37	459.89	270.57	16.613
85.00	37.79	465.19	273.75	16.676
86.00	38.21	470.49	276.92	16.738
87.00	38.63	475.79	280.09	16.799
88.00	39.05	481.09	283.26	16.860
89.00	39.47	486.38	286.43	16.919
90.00	39.89	491.68	289.60	16.979
91.00	40.30	496.97	292.77	17.037
92.00	40.72	502.26	295.94	17.095
93.00	41.14	507.54	299.10	17.152
94.00	41.56	512.83	302.27	17.209
95.00	41.98	518.11	305.43	17.264
96.00	42.40	523.40	308.59	17.320
97.00	42.82	528.68	311.76	17.374
98.00	43.23	533.96	314.92	17.429
99.00	43.65	539.23	318.08	17.482
100.00	44.07	544.51	321.24	17.535
101.00	44.49	549.78	324.39	17.588
102.00	44.90	555.06	327.55	17.640
103.00	45.32	560.33	330.71	17.691
104.00	45.74	565.60	333.87	17.742
105.00	46.16	570.87	337.02	17.792
106.00	46.57	576.14	340.18	17.842
107.00	46.99	581.41	343.33	17.892
108.00	47.41	586.67	346.48	17.941
109.00	47.83	591.94	349.64	17.989
110.00	48.24	597.20	352.79	18.037
111.00	48.66	602.46	355.94	18.085
112.00	49.07	607.73	359.09	18.132
113.00	49.49	612.99	362.24	18.179
114.00	49.91	618.25	365.39	18.225
115.00	50.32	623.50	368.54	18.271
116.00	50.74	628.76	371.69	18.317
117.00	51.16	634.02	374.84	18.362
118.00	51.57	639.27	377.99	18.407
119.00	51.99	644.53	381.14	18.451
120.00	52.40	649.78	384.28	18.495
121.00	52.82	655.03	387.43	18.539
122.00	53.24	660.29	390.57	18.582
123.00	53.65	665.54	393.72	18.625
124.00	54.07	670.79	396.86	18.667
125.00	54.48	676.04	400.01	18.709
126.00	54.90	681.29	403.15	18.751
127.00	55.31	686.53	406.30	18.793
128.00	55.73	691.78	409.44	18.834
129.00	56.14	697.03	412.58	18.875
130.00	56.56	702.27	415.73	18.915
131.00	56.97	707.52	418.87	18.955
132.00	57.39	712.76	422.01	18.995
133.00	57.80	718.01	425.15	19.035
134.00	58.22	723.25	428.29	19.074
135.00	58.63	728.49	431.43	19.113
136.00	59.05	733.73	434.57	19.152
137.00	59.46	738.97	437.71	19.190
138.00	59.88	744.22	440.85	19.228
139.00	60.29	749.45	443.99	19.266
140.00	60.71	754.69	447.13	19.304

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	61.12	759.93	450.27	19.341	221.00	94.16	1177.78	700.72	21.689
142.00	61.54	765.17	453.41	19.378	222.00	94.57	1182.99	703.84	21.712
143.00	61.95	770.41	456.55	19.415	223.00	94.99	1188.20	706.97	21.736
144.00	62.36	775.65	459.68	19.451	224.00	95.40	1193.42	710.09	21.759
145.00	62.78	780.88	462.82	19.487	225.00	95.81	1198.63	713.22	21.782
146.00	63.19	786.12	465.96	19.523	226.00	96.22	1203.84	716.34	21.805
147.00	63.61	791.35	469.10	19.559	227.00	96.63	1209.05	719.47	21.828
148.00	64.02	796.59	472.23	19.595	228.00	97.05	1214.27	722.59	21.851
149.00	64.43	801.82	475.37	19.630	229.00	97.46	1219.48	725.71	21.874
150.00	64.85	807.06	478.51	19.665	230.00	97.87	1224.69	728.84	21.897
151.00	65.26	812.29	481.64	19.700	231.00	98.28	1229.90	731.96	21.919
152.00	65.68	817.52	484.78	19.734	232.00	98.69	1235.11	735.09	21.942
153.00	66.09	822.75	487.91	19.768	233.00	99.11	1240.32	738.21	21.964
154.00	66.50	827.99	491.05	19.803	234.00	99.52	1245.53	741.34	21.986
155.00	66.92	833.22	494.18	19.836	235.00	99.93	1250.74	744.46	22.009
156.00	67.33	838.45	497.32	19.870	236.00	100.34	1255.95	747.59	22.031
157.00	67.75	843.68	500.45	19.903	237.00	100.75	1261.17	750.71	22.053
158.00	68.16	848.91	503.59	19.937	238.00	101.17	1266.38	753.83	22.075
159.00	68.57	854.14	506.72	19.970	239.00	101.58	1271.59	756.96	22.097
160.00	68.99	859.37	509.85	20.002	240.00	101.99	1276.80	760.08	22.118
161.00	69.40	864.60	512.99	20.035	241.00	102.40	1282.01	763.21	22.140
162.00	69.81	869.83	516.12	20.067	242.00	102.81	1287.22	766.33	22.162
163.00	70.23	875.05	519.25	20.100	243.00	103.22	1292.43	769.45	22.183
164.00	70.64	880.28	522.39	20.132	244.00	103.64	1297.64	772.58	22.204
165.00	71.05	885.51	525.52	20.163	245.00	104.05	1302.84	775.70	22.226
166.00	71.47	890.74	528.65	20.195	246.00	104.46	1308.05	778.82	22.247
167.00	71.88	895.96	531.79	20.226	247.00	104.87	1313.26	781.95	22.268
168.00	72.29	901.19	534.92	20.258	248.00	105.28	1318.47	785.07	22.289
169.00	72.71	906.42	538.05	20.289	249.00	105.69	1323.68	788.19	22.310
170.00	73.12	911.64	541.18	20.319	250.00	106.11	1328.89	791.32	22.331
171.00	73.53	916.87	544.31	20.350	251.00	106.52	1334.10	794.44	22.352
172.00	73.95	922.09	547.44	20.380	252.00	106.93	1339.31	797.56	22.373
173.00	74.36	927.32	550.58	20.411	253.00	107.34	1344.52	800.69	22.393
174.00	74.77	932.54	553.71	20.441	254.00	107.75	1349.72	803.81	22.414
175.00	75.19	937.76	556.84	20.471	255.00	108.16	1354.93	806.93	22.434
176.00	75.60	942.99	559.97	20.501	256.00	108.58	1360.14	810.05	22.455
177.00	76.01	948.21	563.10	20.530	257.00	108.99	1365.35	813.18	22.475
178.00	76.43	953.43	566.23	20.560	258.00	109.40	1370.56	816.30	22.495
179.00	76.84	958.66	569.36	20.589	259.00	109.81	1375.76	819.42	22.515
180.00	77.25	963.88	572.49	20.618	260.00	110.22	1380.97	822.55	22.535
181.00	77.66	969.10	575.62	20.647	261.00	110.63	1386.18	825.67	22.555
182.00	78.08	974.32	578.75	20.676	262.00	111.04	1391.39	828.79	22.575
183.00	78.49	979.54	581.88	20.704	263.00	111.46	1396.59	831.91	22.595
184.00	78.90	984.76	585.01	20.733	264.00	111.87	1401.80	835.04	22.615
185.00	79.32	989.99	588.14	20.761	265.00	112.28	1407.01	838.16	22.635
186.00	79.73	995.21	591.27	20.789	266.00	112.69	1412.22	841.28	22.654
187.00	80.14	1000.43	594.40	20.817	267.00	113.10	1417.42	844.40	22.674
188.00	80.55	1005.65	597.53	20.845	268.00	113.51	1422.63	847.52	22.693
189.00	80.97	1010.87	600.65	20.873	269.00	113.93	1427.84	850.65	22.713
190.00	81.38	1016.09	603.78	20.900	270.00	114.34	1433.04	853.77	22.732
191.00	81.79	1021.30	606.91	20.928	271.00	114.75	1438.25	856.89	22.751
192.00	82.21	1026.52	610.04	20.955	272.00	115.16	1443.46	860.01	22.770
193.00	82.62	1031.74	613.17	20.982	273.00	115.57	1448.66	863.13	22.789
194.00	83.03	1036.96	616.30	21.009	274.00	115.98	1453.87	866.26	22.808
195.00	83.44	1042.18	619.42	21.036	275.00	116.39	1459.07	869.38	22.827
196.00	83.86	1047.40	622.55	21.062	276.00	116.81	1464.28	872.50	22.846
197.00	84.27	1052.62	625.68	21.089	277.00	117.22	1469.49	875.62	22.865
198.00	84.68	1057.83	628.81	21.115	278.00	117.63	1474.69	878.74	22.884
199.00	85.09	1063.05	631.94	21.142	279.00	118.04	1479.90	881.87	22.903
200.00	85.51	1068.27	635.06	21.168	280.00	118.45	1485.10	884.99	22.921
201.00	85.92	1073.48	638.19	21.194	281.00	118.86	1490.31	888.11	22.940
202.00	86.33	1078.70	641.32	21.220	282.00	119.27	1495.51	891.23	22.958
203.00	86.74	1083.92	644.44	21.246	283.00	119.68	1500.72	894.35	22.977
204.00	87.16	1089.13	647.57	21.271	284.00	120.10	1505.93	897.47	22.995
205.00	87.57	1094.35	650.70	21.297	285.00	120.51	1511.13	900.59	23.013
206.00	87.98	1099.57	653.83	21.322	286.00	120.92	1516.34	903.72	23.032
207.00	88.39	1104.78	656.95	21.347	287.00	121.33	1521.54	906.84	23.050
208.00	88.80	1110.00	660.08	21.372	288.00	121.74	1526.75	909.96	23.068
209.00	89.22	1115.21	663.21	21.397	289.00	122.15	1531.95	913.08	23.086
210.00	89.63	1120.43	666.33	21.422	290.00	122.56	1537.16	916.20	23.104
211.00	90.04	1125.64	669.46	21.447	291.00	122.97	1542.36	919.32	23.122
212.00	90.45	1130.86	672.58	21.472	292.00	123.39	1547.56	922.44	23.140
213.00	90.87	1136.07	675.71	21.496	293.00	123.80	1552.77	925.56	23.157
214.00	91.28	1141.28	678.84	21.521	294.00	124.21	1557.97	928.69	23.175
215.00	91.69	1146.50	681.96	21.545	295.00	124.62	1563.18	931.81	23.193
216.00	92.10	1151.71	685.09	21.569	296.00	125.03	1568.38	934.93	23.210
217.00	92.51	1156.93	688.21	21.593	297.00	125.44	1573.59	938.05	23.228
218.00	92.93	1162.14	691.34	21.617	298.00	125.85	1578.79	941.17	23.245
219.00	93.34	1167.35	694.46	21.641	299.00	126.26	1584.00	944.29	23.263
220.00	93.75	1172.57	697.59	21.665	300.00	126.68	1589.20	947.41	23.280

60.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.12	37.53	6.41	1.499
4.00	5.20	39.24	7.65	2.012
5.00	5.28	41.30	9.17	2.492
6.00	5.39	43.70	10.93	2.926
7.00	5.52	46.32	12.78	3.333
8.00	5.66	49.46	15.04	3.752
9.00	5.83	53.28	17.85	4.201
10.00	6.01	57.54	20.99	4.650
11.00	6.22	62.12	24.34	5.086
12.00	6.44	66.95	27.82	5.506
13.00	6.67	71.96	31.39	5.907
14.00	6.93	77.13	35.02	6.290
15.00	7.20	82.43	38.67	6.656
16.00	7.48	87.83	42.35	7.004
17.00	7.78	93.33	46.04	7.337
18.00	8.09	98.89	49.72	7.655
19.00	8.41	104.51	53.41	7.959
20.00	8.73	110.18	57.08	8.250
21.00	9.07	115.89	60.74	8.528
22.00	9.41	121.61	64.38	8.795
23.00	9.76	127.35	68.00	9.050
24.00	10.12	133.10	71.60	9.295
25.00	10.47	138.85	75.19	9.530
26.00	10.83	144.60	78.75	9.755
27.00	11.19	150.35	82.30	9.972
28.00	11.56	156.08	85.83	10.180
29.00	11.92	161.80	89.33	10.381
30.00	12.29	167.51	92.83	10.575
31.00	12.65	173.21	96.30	10.762
32.00	13.02	178.90	99.76	10.942
33.00	13.38	184.57	103.20	11.117
34.00	13.75	190.23	106.63	11.286
35.00	14.12	195.87	110.05	11.449
36.00	14.48	201.50	113.45	11.608
37.00	14.85	207.12	116.84	11.762
38.00	15.21	212.72	120.22	11.911
39.00	15.58	218.31	123.59	12.056
40.00	15.94	223.89	126.95	12.197
41.00	16.31	229.45	130.30	12.335
42.00	16.67	235.01	133.64	12.469
43.00	17.04	240.55	136.97	12.599
44.00	17.40	246.08	140.29	12.726
45.00	17.76	251.60	143.61	12.850
46.00	18.13	257.12	146.92	12.972
47.00	18.49	262.62	150.22	13.090
48.00	18.85	268.11	153.52	13.206
49.00	19.21	273.60	156.81	13.319
50.00	19.57	279.08	160.09	13.429
51.00	19.93	284.55	163.37	13.538
52.00	20.29	290.01	166.64	13.644
53.00	20.65	295.46	169.91	13.748
54.00	21.01	300.91	173.17	13.849
55.00	21.37	306.35	176.43	13.949
56.00	21.73	311.78	179.69	14.047
57.00	22.09	317.21	182.94	14.143
58.00	22.44	322.63	186.18	14.237
59.00	22.80	328.04	189.43	14.330
60.00	23.16	333.45	192.66	14.421
61.00	23.51	338.86	195.90	14.510
62.00	23.87	344.26	199.13	14.598
63.00	24.23	349.65	202.36	14.684
64.00	24.58	355.04	205.59	14.769
65.00	24.94	360.42	208.81	14.853
66.00	25.29	365.80	212.03	14.935
67.00	25.65	371.18	215.25	15.016
68.00	26.00	376.55	218.46	15.095
69.00	26.36	381.92	221.67	15.174
70.00	26.71	387.28	224.88	15.251
71.00	27.07	392.64	228.09	15.327
72.00	27.42	398.00	231.30	15.402
73.00	27.77	403.35	234.50	15.476
74.00	28.13	408.70	237.70	15.548
75.00	28.48	414.04	240.90	15.620
76.00	28.83	419.39	244.10	15.691
77.00	29.18	424.73	247.29	15.761
78.00	29.54	430.06	250.49	15.830
79.00	29.89	435.40	253.68	15.897
80.00	30.24	440.73	256.87	15.965
81.00	30.59	446.05	260.06	16.031
82.00	30.94	451.38	263.25	16.096
83.00	31.30	456.70	266.43	16.161
84.00	31.65	462.02	269.62	16.224
85.00	32.00	467.34	272.80	16.287
86.00	32.35	472.66	275.98	16.349
87.00	32.70	477.97	279.16	16.411
88.00	33.05	483.28	282.34	16.471
89.00	33.40	488.59	285.52	16.531
90.00	33.75	493.90	288.69	16.591
91.00	34.10	499.20	291.87	16.649
92.00	34.45	504.50	295.04	16.707
93.00	34.80	509.80	298.21	16.765
94.00	35.15	515.10	301.39	16.821
95.00	35.50	520.40	304.56	16.877
96.00	35.85	525.69	307.73	16.933
97.00	36.20	530.99	310.89	16.988
98.00	36.55	536.28	314.06	17.042
99.00	36.90	541.57	317.23	17.096
100.00	37.25	546.86	320.39	17.149
101.00	37.60	552.14	323.56	17.201
102.00	37.95	557.43	326.72	17.253
103.00	38.30	562.71	329.89	17.305
104.00	38.64	568.00	333.05	17.356
105.00	38.99	573.28	336.21	17.407
106.00	39.34	578.56	339.37	17.457
107.00	39.69	583.83	342.53	17.506
108.00	40.04	589.11	345.69	17.555
109.00	40.39	594.39	348.85	17.604
110.00	40.73	599.66	352.01	17.652
111.00	41.08	604.93	355.16	17.700
112.00	41.43	610.21	358.32	17.747
113.00	41.78	615.48	361.48	17.794
114.00	42.13	620.75	364.63	17.840
115.00	42.47	626.01	367.79	17.886
116.00	42.82	631.28	370.94	17.932
117.00	43.17	636.55	374.09	17.977
118.00	43.52	641.81	377.25	18.022
119.00	43.86	647.08	380.40	18.066
120.00	44.21	652.34	383.55	18.110
121.00	44.56	657.60	386.70	18.154
122.00	44.91	662.86	389.85	18.197
123.00	45.25	668.12	393.00	18.240
124.00	45.60	673.38	396.15	18.283
125.00	45.95	678.64	399.30	18.325
126.00	46.29	683.90	402.45	18.367
127.00	46.64	689.15	405.60	18.409
128.00	46.99	694.41	408.75	18.450
129.00	47.33	699.67	411.89	18.491
130.00	47.68	704.92	415.04	18.531
131.00	48.03	710.17	418.19	18.572
132.00	48.37	715.42	421.33	18.612
133.00	48.72	720.68	424.48	18.651
134.00	49.07	725.93	427.62	18.690
135.00	49.41	731.18	430.77	18.730
136.00	49.76	736.43	433.91	18.768
137.00	50.10	741.68	437.05	18.807
138.00	50.45	746.92	440.20	18.845
139.00	50.80	752.17	443.34	18.883
140.00	51.14	757.42	446.48	18.920

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	51.49	762.66	449.63	18.958	221.00	79.06	1180.92	700.27	21.308
142.00	51.84	767.91	452.77	18.995	222.00	79.40	1186.14	703.40	21.331
143.00	52.18	773.15	455.91	19.032	223.00	79.75	1191.35	706.53	21.355
144.00	52.53	778.40	459.05	19.068	224.00	80.09	1196.57	709.65	21.378
145.00	52.87	783.64	462.19	19.104	225.00	80.43	1201.79	712.78	21.401
146.00	53.22	788.88	465.33	19.140	226.00	80.78	1207.00	715.91	21.424
147.00	53.56	794.13	468.47	19.176	227.00	81.12	1212.22	719.03	21.448
148.00	53.91	799.37	471.61	19.212	228.00	81.46	1217.43	722.16	21.470
149.00	54.26	804.61	474.75	19.247	229.00	81.81	1222.65	725.29	21.493
150.00	54.60	809.85	477.89	19.282	230.00	82.15	1227.86	728.41	21.516
151.00	54.95	815.09	481.03	19.317	231.00	82.49	1233.08	731.54	21.539
152.00	55.29	820.33	484.17	19.352	232.00	82.84	1238.29	734.66	21.561
153.00	55.64	825.57	487.31	19.386	233.00	83.18	1243.51	737.79	21.584
154.00	55.98	830.81	490.45	19.420	234.00	83.53	1248.72	740.92	21.606
155.00	56.33	836.04	493.59	19.454	235.00	83.87	1253.94	744.04	21.628
156.00	56.67	841.28	496.73	19.488	236.00	84.21	1259.15	747.17	21.650
157.00	57.02	846.52	499.86	19.521	237.00	84.56	1264.36	750.29	21.672
158.00	57.36	851.76	503.00	19.554	238.00	84.90	1269.58	753.42	21.694
159.00	57.71	856.99	506.14	19.587	239.00	85.24	1274.79	756.54	21.716
160.00	58.05	862.23	509.27	19.620	240.00	85.59	1280.00	759.67	21.738
161.00	58.40	867.46	512.41	19.653	241.00	85.93	1285.22	762.79	21.760
162.00	58.74	872.70	515.55	19.685	242.00	86.27	1290.43	765.92	21.781
163.00	59.09	877.93	518.68	19.717	243.00	86.62	1295.64	769.05	21.803
164.00	59.44	883.16	521.82	19.749	244.00	86.96	1300.85	772.17	21.824
165.00	59.78	888.40	524.95	19.781	245.00	87.30	1306.07	775.30	21.845
166.00	60.13	893.63	528.09	19.813	246.00	87.65	1311.28	778.42	21.867
167.00	60.47	898.86	531.22	19.844	247.00	87.99	1316.49	781.54	21.888
168.00	60.81	904.09	534.36	19.875	248.00	88.33	1321.70	784.67	21.909
169.00	61.16	909.33	537.49	19.907	249.00	88.68	1326.92	787.79	21.930
170.00	61.50	914.56	540.63	19.937	250.00	89.02	1332.13	790.92	21.951
171.00	61.85	919.79	543.76	19.968	251.00	89.36	1337.34	794.04	21.971
172.00	62.19	925.02	546.90	19.999	252.00	89.71	1342.55	797.17	21.992
173.00	62.54	930.25	550.03	20.029	253.00	90.05	1347.76	800.29	22.013
174.00	62.88	935.48	553.17	20.059	254.00	90.39	1352.97	803.42	22.033
175.00	63.23	940.71	556.30	20.089	255.00	90.74	1358.18	806.54	22.054
176.00	63.57	945.93	559.43	20.119	256.00	91.08	1363.39	809.67	22.074
177.00	63.92	951.16	562.57	20.148	257.00	91.42	1368.61	812.79	22.095
178.00	64.26	956.39	565.70	20.178	258.00	91.77	1373.82	815.91	22.115
179.00	64.61	961.62	568.83	20.207	259.00	92.11	1379.03	819.04	22.135
180.00	64.95	966.85	571.96	20.236	260.00	92.45	1384.24	822.16	22.155
181.00	65.30	972.07	575.10	20.265	261.00	92.80	1389.45	825.29	22.175
182.00	65.64	977.30	578.23	20.294	262.00	93.14	1394.66	828.41	22.195
183.00	65.98	982.53	581.36	20.323	263.00	93.48	1399.87	831.53	22.215
184.00	66.33	987.75	584.49	20.351	264.00	93.82	1405.08	834.66	22.235
185.00	66.67	992.98	587.62	20.379	265.00	94.17	1410.29	837.78	22.254
186.00	67.02	998.20	590.76	20.408	266.00	94.51	1415.50	840.90	22.274
187.00	67.36	1003.43	593.89	20.436	267.00	94.85	1420.71	844.03	22.293
188.00	67.71	1008.65	597.02	20.464	268.00	95.20	1425.92	847.15	22.313
189.00	68.05	1013.88	600.15	20.491	269.00	95.54	1431.13	850.27	22.332
190.00	68.40	1019.10	603.28	20.519	270.00	95.88	1436.33	853.40	22.352
191.00	68.74	1024.33	606.41	20.546	271.00	96.23	1441.54	856.52	22.371
192.00	69.08	1029.55	609.54	20.574	272.00	96.57	1446.75	859.64	22.390
193.00	69.43	1034.77	612.67	20.601	273.00	96.91	1451.96	862.77	22.409
194.00	69.77	1040.00	615.80	20.628	274.00	97.26	1457.17	865.89	22.428
195.00	70.12	1045.22	618.93	20.654	275.00	97.60	1462.38	869.01	22.447
196.00	70.46	1050.44	622.06	20.681	276.00	97.94	1467.59	872.14	22.466
197.00	70.80	1055.66	625.19	20.708	277.00	98.28	1472.80	875.26	22.485
198.00	71.15	1060.88	628.32	20.734	278.00	98.63	1478.00	878.38	22.504
199.00	71.49	1066.11	631.45	20.761	279.00	98.97	1483.21	881.50	22.522
200.00	71.84	1071.33	634.58	20.787	280.00	99.31	1488.42	884.63	22.541
201.00	72.18	1076.55	637.71	20.813	281.00	99.66	1493.63	887.75	22.560
202.00	72.53	1081.77	640.84	20.839	282.00	100.00	1498.84	890.87	22.578
203.00	72.87	1086.99	643.97	20.864	283.00	100.34	1504.04	894.00	22.597
204.00	73.21	1092.21	647.10	20.890	284.00	100.69	1509.25	897.12	22.615
205.00	73.56	1097.43	650.23	20.916	285.00	101.03	1514.46	900.24	22.633
206.00	73.90	1102.65	653.36	20.941	286.00	101.37	1519.67	903.36	22.652
207.00	74.25	1107.87	656.48	20.966	287.00	101.71	1524.88	906.49	22.670
208.00	74.59	1113.09	659.61	20.991	288.00	102.06	1530.08	909.61	22.688
209.00	74.93	1118.31	662.74	21.016	289.00	102.40	1535.29	912.73	22.706
210.00	75.28	1123.53	665.87	21.041	290.00	102.74	1540.50	915.85	22.724
211.00	75.62	1128.75	669.00	21.066	291.00	103.09	1545.70	918.98	22.742
212.00	75.96	1133.97	672.13	21.091	292.00	103.43	1550.91	922.10	22.760
213.00	76.31	1139.18	675.25	21.115	293.00	103.77	1556.12	925.22	22.777
214.00	76.65	1144.40	678.38	21.140	294.00	104.11	1561.32	928.34	22.795
215.00	77.00	1149.62	681.51	21.164	295.00	104.46	1566.53	931.46	22.813
216.00	77.34	1154.84	684.64	21.188	296.00	104.80	1571.74	934.59	22.830
217.00	77.68	1160.05	687.76	21.212	297.00	105.14	1576.94	937.71	22.848
218.00	78.03	1165.27	690.89	21.236	298.00	105.49	1582.15	940.83	22.866
219.00	78.37	1170.49	694.02	21.260	299.00	105.83	1587.36	943.95	22.883
220.00	78.71	1175.71	697.15	21.284	300.00	106.17	1592.56	947.07	22.900

70.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
3.00	5.00	42.45	6.97	1.429
4.00	5.07	44.12	8.15	1.933
5.00	5.15	46.12	9.60	2.401
6.00	5.24	48.43	11.26	2.818
7.00	5.35	50.93	12.99	3.206
8.00	5.47	53.94	15.12	3.607
9.00	5.61	57.61	17.80	4.038
10.00	5.77	61.71	20.81	4.470
11.00	5.94	66.13	24.03	4.891
12.00	6.12	70.78	27.38	5.296
13.00	6.31	75.61	30.83	5.682
14.00	6.52	80.59	34.34	6.051
15.00	6.74	85.69	37.89	6.403
16.00	6.97	90.90	41.46	6.739
17.00	7.21	96.20	45.05	7.061
18.00	7.46	101.58	48.65	7.368
19.00	7.72	107.03	52.25	7.663
20.00	7.99	112.54	55.86	7.946
21.00	8.27	118.10	59.46	8.217
22.00	8.55	123.69	63.05	8.477
23.00	8.84	129.32	66.63	8.727
24.00	9.13	134.97	70.21	8.967
25.00	9.43	140.63	73.77	9.198
26.00	9.73	146.31	77.32	9.421
27.00	10.03	151.99	80.85	9.636
28.00	10.33	157.67	84.37	9.842
29.00	10.64	163.35	87.87	10.042
30.00	10.95	169.03	91.36	10.234
31.00	11.26	174.71	94.84	10.420
32.00	11.57	180.38	98.30	10.600
33.00	11.88	186.04	101.75	10.774
34.00	12.19	191.69	105.19	10.943
35.00	12.51	197.33	108.62	11.107
36.00	12.82	202.96	112.03	11.265
37.00	13.13	208.58	115.43	11.419
38.00	13.44	214.18	118.82	11.569
39.00	13.76	219.78	122.20	11.714
40.00	14.07	225.37	125.58	11.856
41.00	14.38	230.95	128.94	11.993
42.00	14.69	236.52	132.29	12.128
43.00	15.01	242.07	135.64	12.258
44.00	15.32	247.62	138.97	12.386
45.00	15.63	253.16	142.30	12.510
46.00	15.94	258.69	145.63	12.632
47.00	16.25	264.21	148.94	12.751
48.00	16.56	269.72	152.25	12.867
49.00	16.87	275.22	155.55	12.980
50.00	17.18	280.72	158.85	13.091
51.00	17.49	286.21	162.14	13.200
52.00	17.80	291.69	165.43	13.306
53.00	18.11	297.16	168.71	13.410
54.00	18.42	302.62	171.98	13.513
55.00	18.73	308.08	175.25	13.613
56.00	19.03	313.53	178.52	13.711
57.00	19.34	318.98	181.78	13.807
58.00	19.65	324.42	185.04	13.902
59.00	19.96	329.85	188.29	13.995
60.00	20.26	335.28	191.54	14.086
61.00	20.57	340.70	194.79	14.176
62.00	20.88	346.12	198.03	14.264
63.00	21.18	351.53	201.27	14.350
64.00	21.49	356.93	204.51	14.435
65.00	21.80	362.34	207.74	14.519
66.00	22.10	367.73	210.97	14.602
67.00	22.41	373.12	214.20	14.683
68.00	22.71	378.51	217.42	14.762
69.00	23.02	383.90	220.65	14.841
70.00	23.32	389.28	223.86	14.918
71.00	23.62	394.65	227.08	14.995
72.00	23.93	400.02	230.30	15.070
73.00	24.23	405.39	233.51	15.144
74.00	24.54	410.76	236.72	15.217
75.00	24.84	416.12	239.93	15.289
76.00	25.14	421.47	243.13	15.360
77.00	25.45	426.83	246.34	15.430
78.00	25.75	432.18	249.54	15.499
79.00	26.05	437.53	252.74	15.567
80.00	26.36	442.87	255.94	15.634
81.00	26.66	448.21	259.13	15.701
82.00	26.96	453.55	262.33	15.766
83.00	27.26	458.89	265.52	15.831
84.00	27.56	464.22	268.71	15.895
85.00	27.87	469.55	271.90	15.958
86.00	28.17	474.88	275.09	16.020
87.00	28.47	480.21	278.28	16.082
88.00	28.77	485.53	281.46	16.142
89.00	29.07	490.85	284.65	16.203
90.00	29.37	496.17	287.83	16.262
91.00	29.67	501.49	291.01	16.321
92.00	29.98	506.81	294.19	16.379
93.00	30.28	512.12	297.37	16.436
94.00	30.58	517.43	300.55	16.493
95.00	30.88	522.74	303.72	16.549
96.00	31.18	528.04	306.90	16.605
97.00	31.48	533.35	310.08	16.660
98.00	31.78	538.65	313.25	16.714
99.00	32.08	543.95	316.42	16.768
100.00	32.38	549.25	319.59	16.821
101.00	32.68	554.55	322.76	16.874
102.00	32.98	559.85	325.93	16.926
103.00	33.28	565.14	329.10	16.978
104.00	33.58	570.43	332.27	17.029
105.00	33.88	575.72	335.44	17.080
106.00	34.18	581.01	338.60	17.130
107.00	34.48	586.30	341.77	17.179
108.00	34.78	591.59	344.93	17.229
109.00	35.07	596.87	348.10	17.277
110.00	35.37	602.16	351.26	17.326
111.00	35.67	607.44	354.42	17.373
112.00	35.97	612.72	357.58	17.421
113.00	36.27	618.00	360.74	17.468
114.00	36.57	623.28	363.90	17.514
115.00	36.87	628.56	367.06	17.560
116.00	37.17	633.84	370.22	17.606
117.00	37.46	639.11	373.38	17.651
118.00	37.76	644.39	376.54	17.696
119.00	38.06	649.66	379.69	17.741
120.00	38.36	654.93	382.85	17.785
121.00	38.66	660.20	386.00	17.828
122.00	38.96	665.47	389.16	17.872
123.00	39.25	670.74	392.31	17.915
124.00	39.55	676.01	395.47	17.957
125.00	39.85	681.27	398.62	18.000
126.00	40.15	686.54	401.77	18.042
127.00	40.45	691.80	404.93	18.083
128.00	40.74	697.07	408.08	18.125
129.00	41.04	702.33	411.23	18.166
130.00	41.34	707.59	414.38	18.206
131.00	41.64	712.85	417.53	18.247
132.00	41.93	718.11	420.68	18.287
133.00	42.23	723.37	423.83	18.326
134.00	42.53	728.63	426.98	18.366
135.00	42.83	733.89	430.13	18.405
136.00	43.12	739.14	433.27	18.443
137.00	43.42	744.40	436.42	18.482
138.00	43.72	749.66	439.57	18.520
139.00	44.01	754.91	442.71	18.558
140.00	44.31	760.16	445.86	18.596

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	44.61	765.42	449.01	18.633	221.00	68.27	1184.07	699.84	20.986
142.00	44.91	770.67	452.15	18.670	222.00	68.56	1189.29	702.97	21.009
143.00	45.20	775.92	455.30	18.707	223.00	68.86	1194.51	706.10	21.033
144.00	45.50	781.17	458.44	18.744	224.00	69.15	1199.73	709.23	21.056
145.00	45.80	786.42	461.59	18.780	225.00	69.45	1204.95	712.36	21.079
146.00	46.09	791.67	464.73	18.816	226.00	69.74	1210.17	715.48	21.102
147.00	46.39	796.92	467.87	18.852	227.00	70.04	1215.38	718.61	21.125
148.00	46.69	802.17	471.02	18.888	228.00	70.33	1220.60	721.74	21.148
149.00	46.98	807.42	474.16	18.923	229.00	70.63	1225.82	724.87	21.171
150.00	47.28	812.66	477.30	18.958	230.00	70.92	1231.04	728.00	21.194
151.00	47.58	817.91	480.45	18.993	231.00	71.22	1236.26	731.12	21.217
152.00	47.87	823.15	483.59	19.028	232.00	71.51	1241.48	734.25	21.239
153.00	48.17	828.40	486.73	19.062	233.00	71.81	1246.69	737.38	21.261
154.00	48.47	833.64	489.87	19.096	234.00	72.10	1251.91	740.51	21.284
155.00	48.76	838.89	493.01	19.130	235.00	72.40	1257.13	743.63	21.306
156.00	49.06	844.13	496.15	19.164	236.00	72.69	1262.35	746.76	21.328
157.00	49.36	849.37	499.29	19.197	237.00	72.98	1267.56	749.89	21.350
158.00	49.65	854.62	502.43	19.231	238.00	73.28	1272.78	753.01	21.372
159.00	49.95	859.86	505.57	19.264	239.00	73.57	1278.00	756.14	21.394
160.00	50.25	865.10	508.71	19.296	240.00	73.87	1283.21	759.27	21.416
161.00	50.54	870.34	511.85	19.329	241.00	74.16	1288.43	762.39	21.438
162.00	50.84	875.58	514.99	19.362	242.00	74.46	1293.64	765.52	21.459
163.00	51.13	880.82	518.13	19.394	243.00	74.75	1298.86	768.65	21.481
164.00	51.43	886.06	521.27	19.426	244.00	75.05	1304.08	771.77	21.502
165.00	51.73	891.30	524.41	19.458	245.00	75.34	1309.29	774.90	21.523
166.00	52.02	896.54	527.54	19.489	246.00	75.64	1314.51	778.03	21.545
167.00	52.32	901.77	530.68	19.521	247.00	75.93	1319.72	781.15	21.566
168.00	52.61	907.01	533.82	19.552	248.00	76.22	1324.94	784.28	21.587
169.00	52.91	912.25	536.96	19.583	249.00	76.52	1330.15	787.40	21.608
170.00	53.21	917.48	540.09	19.614	250.00	76.81	1335.37	790.53	21.629
171.00	53.50	922.72	543.23	19.645	251.00	77.11	1340.58	793.66	21.650
172.00	53.80	927.96	546.37	19.675	252.00	77.40	1345.79	796.78	21.670
173.00	54.09	933.19	549.50	19.706	253.00	77.70	1351.01	799.91	21.691
174.00	54.39	938.42	552.64	19.736	254.00	77.99	1356.22	803.03	21.712
175.00	54.69	943.66	555.78	19.766	255.00	78.29	1361.44	806.16	21.732
176.00	54.98	948.89	558.91	19.796	256.00	78.58	1366.65	809.28	21.752
177.00	55.28	954.13	562.05	19.825	257.00	78.87	1371.86	812.41	21.773
178.00	55.57	959.36	565.18	19.855	258.00	79.17	1377.08	815.54	21.793
179.00	55.87	964.59	568.32	19.884	259.00	79.46	1382.29	818.66	21.813
180.00	56.16	969.82	571.45	19.913	260.00	79.76	1387.50	821.79	21.833
181.00	56.46	975.06	574.59	19.942	261.00	80.05	1392.72	824.91	21.853
182.00	56.76	980.29	577.72	19.971	262.00	80.35	1397.93	828.04	21.873
183.00	57.05	985.52	580.86	20.000	263.00	80.64	1403.14	831.16	21.893
184.00	57.35	990.75	583.99	20.028	264.00	80.94	1408.35	834.29	21.913
185.00	57.64	995.98	587.12	20.057	265.00	81.23	1413.57	837.41	21.933
186.00	57.94	1001.21	590.26	20.085	266.00	81.52	1418.78	840.54	21.952
187.00	58.23	1006.44	593.39	20.113	267.00	81.82	1423.99	843.66	21.972
188.00	58.53	1011.67	596.53	20.141	268.00	82.11	1429.20	846.79	21.991
189.00	58.82	1016.90	599.66	20.168	269.00	82.41	1434.42	849.91	22.011
190.00	59.12	1022.13	602.79	20.196	270.00	82.70	1439.63	853.03	22.030
191.00	59.42	1027.35	605.92	20.223	271.00	83.00	1444.84	856.16	22.049
192.00	59.71	1032.58	609.06	20.251	272.00	83.29	1450.05	859.28	22.068
193.00	60.01	1037.81	612.19	20.278	273.00	83.58	1455.26	862.41	22.088
194.00	60.30	1043.04	615.32	20.305	274.00	83.88	1460.47	865.53	22.107
195.00	60.60	1048.26	618.45	20.332	275.00	84.17	1465.68	868.66	22.126
196.00	60.89	1053.49	621.59	20.359	276.00	84.47	1470.89	871.78	22.145
197.00	61.19	1058.72	624.72	20.385	277.00	84.76	1476.11	874.90	22.163
198.00	61.48	1063.94	627.85	20.412	278.00	85.05	1481.32	878.03	22.182
199.00	61.78	1069.17	630.98	20.438	279.00	85.35	1486.53	881.15	22.201
200.00	62.07	1074.39	634.11	20.464	280.00	85.64	1491.74	884.28	22.220
201.00	62.37	1079.62	637.24	20.490	281.00	85.94	1496.95	887.40	22.238
202.00	62.66	1084.84	640.38	20.516	282.00	86.23	1502.16	890.52	22.257
203.00	62.96	1090.07	643.51	20.542	283.00	86.53	1507.37	893.65	22.275
204.00	63.25	1095.29	646.64	20.568	284.00	86.82	1512.58	896.77	22.293
205.00	63.55	1100.52	649.77	20.593	285.00	87.11	1517.79	899.89	22.312
206.00	63.84	1105.74	652.90	20.619	286.00	87.41	1523.00	903.02	22.330
207.00	64.14	1110.97	656.03	20.644	287.00	87.70	1528.21	906.14	22.348
208.00	64.43	1116.19	659.16	20.669	288.00	88.00	1533.42	909.26	22.366
209.00	64.73	1121.41	662.29	20.694	289.00	88.29	1538.63	912.39	22.384
210.00	65.02	1126.63	665.42	20.719	290.00	88.58	1543.84	915.51	22.402
211.00	65.32	1131.86	668.55	20.744	291.00	88.88	1549.05	918.63	22.420
212.00	65.61	1137.08	671.68	20.768	292.00	89.17	1554.26	921.76	22.438
213.00	65.91	1142.30	674.81	20.793	293.00	89.47	1559.46	924.88	22.456
214.00	66.20	1147.52	677.94	20.818	294.00	89.76	1564.67	928.00	22.474
215.00	66.50	1152.74	681.07	20.842	295.00	90.06	1569.88	931.13	22.491
216.00	66.79	1157.97	684.20	20.866	296.00	90.35	1575.09	934.25	22.509
217.00	67.09	1163.19	687.33	20.890	297.00	90.64	1580.30	937.37	22.527
218.00	67.38	1168.41	690.46	20.914	298.00	90.94	1585.51	940.50	22.544
219.00	67.68	1173.63	693.58	20.938	299.00	91.23	1590.72	943.62	22.562
220.00	67.97	1178.85	696.71	20.962	300.00	91.53	1595.92	946.74	22.579

80.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
4.00	4.96	48.92	8.69	1.863
5.00	5.03	50.88	10.08	2.320
6.00	5.11	53.11	11.65	2.723
7.00	5.21	55.51	13.28	3.097
8.00	5.32	58.41	15.31	3.483
9.00	5.44	61.96	17.88	3.900
10.00	5.57	65.94	20.78	4.319
11.00	5.71	70.22	23.89	4.727
12.00	5.87	74.73	27.15	5.119
13.00	6.04	79.42	30.49	5.495
14.00	6.21	84.25	33.90	5.853
15.00	6.40	89.20	37.36	6.194
16.00	6.59	94.26	40.84	6.520
17.00	6.79	99.41	44.35	6.832
18.00	7.00	104.63	47.87	7.131
19.00	7.22	109.93	51.40	7.418
20.00	7.45	115.30	54.94	7.693
21.00	7.68	120.72	58.48	7.957
22.00	7.92	126.18	62.02	8.212
23.00	8.16	131.69	65.55	8.456
24.00	8.41	137.23	69.09	8.692
25.00	8.66	142.80	72.61	8.920
26.00	8.91	148.39	76.13	9.139
27.00	9.17	154.00	79.64	9.351
28.00	9.43	159.62	83.15	9.555
29.00	9.70	165.25	86.64	9.753
30.00	9.96	170.88	90.12	9.943
31.00	10.23	176.52	93.59	10.128
32.00	10.50	182.16	97.05	10.307
33.00	10.77	187.79	100.49	10.481
34.00	11.04	193.42	103.93	10.649
35.00	11.31	199.04	107.36	10.812
36.00	11.58	204.66	110.78	10.970
37.00	11.85	210.27	114.18	11.124
38.00	12.13	215.88	117.58	11.273
39.00	12.40	221.48	120.97	11.419
40.00	12.67	227.06	124.35	11.560
41.00	12.94	232.64	127.72	11.698
42.00	13.22	238.22	131.08	11.832
43.00	13.49	243.78	134.43	11.963
44.00	13.76	249.34	137.78	12.091
45.00	14.03	254.88	141.12	12.215
46.00	14.31	260.42	144.45	12.337
47.00	14.58	265.95	147.77	12.456
48.00	14.85	271.48	151.09	12.572
49.00	15.12	276.99	154.40	12.686
50.00	15.39	282.50	157.71	12.797
51.00	15.67	288.00	161.01	12.906
52.00	15.94	293.50	164.31	13.013
53.00	16.21	298.98	167.60	13.118
54.00	16.48	304.46	170.88	13.220
55.00	16.75	309.93	174.16	13.320
56.00	17.02	315.40	177.44	13.419
57.00	17.29	320.86	180.71	13.515
58.00	17.56	326.31	183.98	13.610
59.00	17.83	331.76	187.24	13.703
60.00	18.10	337.20	190.50	13.795
61.00	18.37	342.64	193.76	13.885
62.00	18.64	348.07	197.01	13.973
63.00	18.90	353.50	200.26	14.060
64.00	19.17	358.92	203.50	14.145
65.00	19.44	364.34	206.74	14.229
66.00	19.71	369.75	209.98	14.312
67.00	19.98	375.15	213.22	14.393
68.00	20.24	380.56	216.45	14.473
69.00	20.51	385.95	219.68	14.552
70.00	20.78	391.35	222.91	14.630
71.00	21.05	396.74	226.13	14.706
72.00	21.31	402.12	229.35	14.781
73.00	21.58	407.50	232.57	14.856
74.00	21.85	412.88	235.79	14.929
75.00	22.11	418.26	239.01	15.001
76.00	22.38	423.63	242.22	15.072
77.00	22.64	429.00	245.43	15.142
78.00	22.91	434.36	248.64	15.212
79.00	23.18	439.72	251.85	15.280
80.00	23.44	445.08	255.05	15.347
81.00	23.71	450.43	258.25	15.414
82.00	23.97	455.78	261.46	15.479
83.00	24.24	461.13	264.66	15.544
84.00	24.50	466.48	267.85	15.608
85.00	24.77	471.82	271.05	15.671
86.00	25.03	477.16	274.24	15.734
87.00	25.30	482.50	277.44	15.796
88.00	25.56	487.84	280.63	15.857
89.00	25.83	493.17	283.82	15.917
90.00	26.09	498.50	287.01	15.976
91.00	26.35	503.83	290.20	16.035
92.00	26.62	509.15	293.38	16.094
93.00	26.88	514.48	296.57	16.151
94.00	27.15	519.80	299.75	16.208
95.00	27.41	525.12	302.93	16.264
96.00	27.67	530.44	306.12	16.320
97.00	27.94	535.75	309.30	16.375
98.00	28.20	541.07	312.47	16.430
99.00	28.46	546.38	315.65	16.483
100.00	28.73	551.69	318.83	16.537
101.00	28.99	556.99	322.00	16.590
102.00	29.25	562.30	325.18	16.642
103.00	29.51	567.60	328.35	16.694
104.00	29.78	572.91	331.53	16.745
105.00	30.04	578.21	334.70	16.796
106.00	30.30	583.51	337.87	16.846
107.00	30.57	588.81	341.04	16.896
108.00	30.83	594.10	344.21	16.945
109.00	31.09	599.40	347.38	16.994
110.00	31.35	604.69	350.54	17.042
111.00	31.61	609.98	353.71	17.090
112.00	31.88	615.27	356.88	17.137
113.00	32.14	620.56	360.04	17.184
114.00	32.40	625.85	363.21	17.231
115.00	32.66	631.13	366.37	17.277
116.00	32.92	636.42	369.53	17.323
117.00	33.19	641.70	372.69	17.368
118.00	33.45	646.98	375.86	17.413
119.00	33.71	652.27	379.02	17.458
120.00	33.97	657.55	382.18	17.502
121.00	34.23	662.82	385.34	17.546
122.00	34.49	668.10	388.49	17.589
123.00	34.75	673.38	391.65	17.632
124.00	35.02	678.65	394.81	17.675
125.00	35.28	683.93	397.97	17.717
126.00	35.54	689.20	401.12	17.759
127.00	35.80	694.47	404.28	17.801
128.00	36.06	699.75	407.44	17.842
129.00	36.32	705.02	410.59	17.883
130.00	36.58	710.28	413.74	17.924
131.00	36.84	715.55	416.90	17.964
132.00	37.10	720.82	420.05	18.005
133.00	37.36	726.09	423.20	18.044
134.00	37.62	731.35	426.36	18.084
135.00	37.89	736.62	429.51	18.123
136.00	38.15	741.88	432.66	18.162
137.00	38.41	747.14	435.81	18.200
138.00	38.67	752.41	438.96	18.239
139.00	38.93	757.67	442.11	18.277
140.00	39.19	762.93	445.26	18.314

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	39.45	768.19	448.41	18.352	221.00	60.18	1187.22	699.42	20.706
142.00	39.71	773.45	451.56	18.389	222.00	60.43	1192.44	702.55	20.730
143.00	39.97	778.70	454.71	18.426	223.00	60.69	1197.66	705.68	20.753
144.00	40.23	783.96	457.85	18.462	224.00	60.95	1202.89	708.81	20.777
145.00	40.49	789.22	461.00	18.499	225.00	61.21	1208.11	711.94	20.800
146.00	40.75	794.47	464.15	18.535	226.00	61.47	1213.33	715.07	20.823
147.00	41.01	799.73	467.29	18.571	227.00	61.72	1218.55	718.20	20.846
148.00	41.27	804.98	470.44	18.606	228.00	61.98	1223.78	721.33	20.869
149.00	41.53	810.24	473.59	18.642	229.00	62.24	1229.00	724.46	20.892
150.00	41.79	815.49	476.73	18.677	230.00	62.50	1234.22	727.59	20.915
151.00	42.05	820.74	479.88	18.712	231.00	62.76	1239.44	730.72	20.937
152.00	42.31	825.99	483.02	18.746	232.00	63.02	1244.66	733.85	20.960
153.00	42.57	831.24	486.17	18.781	233.00	63.27	1249.88	736.98	20.982
154.00	42.83	836.49	489.31	18.815	234.00	63.53	1255.10	740.10	21.005
155.00	43.09	841.74	492.46	18.849	235.00	63.79	1260.32	743.23	21.027
156.00	43.35	846.99	495.60	18.883	236.00	64.05	1265.54	746.36	21.049
157.00	43.61	852.24	498.74	18.916	237.00	64.31	1270.76	749.49	21.071
158.00	43.87	857.49	501.88	18.950	238.00	64.56	1275.98	752.62	21.093
159.00	44.13	862.74	505.03	18.983	239.00	64.82	1281.20	755.75	21.115
160.00	44.39	867.98	508.17	19.016	240.00	65.08	1286.42	758.88	21.137
161.00	44.65	873.23	511.31	19.048	241.00	65.34	1291.64	762.00	21.158
162.00	44.91	878.48	514.45	19.081	242.00	65.60	1296.86	765.13	21.180
163.00	45.17	883.72	517.59	19.113	243.00	65.85	1302.08	768.26	21.202
164.00	45.43	888.96	520.74	19.145	244.00	66.11	1307.30	771.39	21.223
165.00	45.69	894.21	523.88	19.177	245.00	66.37	1312.51	774.51	21.244
166.00	45.94	899.45	527.02	19.209	246.00	66.63	1317.73	777.64	21.266
167.00	46.20	904.70	530.16	19.240	247.00	66.88	1322.95	780.77	21.287
168.00	46.46	909.94	533.30	19.272	248.00	67.14	1328.17	783.90	21.308
169.00	46.72	915.18	536.44	19.303	249.00	67.40	1333.39	787.02	21.329
170.00	46.98	920.42	539.58	19.334	250.00	67.66	1338.60	790.15	21.350
171.00	47.24	925.66	542.72	19.364	251.00	67.92	1343.82	793.28	21.371
172.00	47.50	930.90	545.85	19.395	252.00	68.17	1349.04	796.41	21.391
173.00	47.76	936.14	548.99	19.425	253.00	68.43	1354.26	799.53	21.412
174.00	48.02	941.38	552.13	19.455	254.00	68.69	1359.47	802.66	21.433
175.00	48.28	946.62	555.27	19.485	255.00	68.95	1364.69	805.79	21.453
176.00	48.54	951.86	558.41	19.515	256.00	69.21	1369.90	808.91	21.474
177.00	48.80	957.10	561.55	19.545	257.00	69.46	1375.12	812.04	21.494
178.00	49.06	962.34	564.68	19.574	258.00	69.72	1380.34	815.17	21.514
179.00	49.31	967.57	567.82	19.604	259.00	69.98	1385.55	818.29	21.534
180.00	49.57	972.81	570.96	19.633	260.00	70.24	1390.77	821.42	21.554
181.00	49.83	978.05	574.09	19.662	261.00	70.49	1395.98	824.55	21.574
182.00	50.09	983.28	577.23	19.691	262.00	70.75	1401.20	827.67	21.594
183.00	50.35	988.52	580.37	19.720	263.00	71.01	1406.42	830.80	21.614
184.00	50.61	993.75	583.50	19.748	264.00	71.27	1411.63	833.92	21.634
185.00	50.87	998.99	586.64	19.776	265.00	71.52	1416.85	837.05	21.654
186.00	51.13	1004.22	589.78	19.805	266.00	71.78	1422.06	840.18	21.673
187.00	51.39	1009.46	592.91	19.833	267.00	72.04	1427.27	843.30	21.693
188.00	51.64	1014.69	596.05	19.861	268.00	72.30	1432.49	846.43	21.712
189.00	51.90	1019.92	599.18	19.888	269.00	72.56	1437.70	849.55	21.732
190.00	52.16	1025.16	602.32	19.916	270.00	72.81	1442.92	852.68	21.751
191.00	52.42	1030.39	605.45	19.943	271.00	73.07	1448.13	855.80	21.770
192.00	52.68	1035.62	608.59	19.971	272.00	73.33	1453.35	858.93	21.790
193.00	52.94	1040.85	611.72	19.998	273.00	73.59	1458.56	862.06	21.809
194.00	53.20	1046.08	614.86	20.025	274.00	73.84	1463.77	865.18	21.828
195.00	53.46	1051.32	617.99	20.052	275.00	74.10	1468.99	868.31	21.847
196.00	53.71	1056.55	621.12	20.079	276.00	74.36	1474.20	871.43	21.866
197.00	53.97	1061.78	624.26	20.105	277.00	74.62	1479.41	874.56	21.885
198.00	54.23	1067.01	627.39	20.132	278.00	74.87	1484.63	877.68	21.903
199.00	54.49	1072.24	630.52	20.158	279.00	75.13	1489.84	880.81	21.922
200.00	54.75	1077.47	633.66	20.184	280.00	75.39	1495.05	883.93	21.941
201.00	55.01	1082.70	636.79	20.210	281.00	75.65	1500.27	887.06	21.959
202.00	55.27	1087.92	639.92	20.236	282.00	75.90	1505.48	890.18	21.978
203.00	55.52	1093.15	643.06	20.262	283.00	76.16	1510.69	893.31	21.996
204.00	55.78	1098.38	646.19	20.288	284.00	76.42	1515.90	896.43	22.015
205.00	56.04	1103.61	649.32	20.313	285.00	76.68	1521.12	899.55	22.033
206.00	56.30	1108.84	652.45	20.339	286.00	76.93	1526.33	902.68	22.051
207.00	56.56	1114.06	655.59	20.364	287.00	77.19	1531.54	905.80	22.070
208.00	56.82	1119.29	658.72	20.389	288.00	77.45	1536.75	908.93	22.088
209.00	57.08	1124.52	661.85	20.414	289.00	77.71	1541.96	912.05	22.106
210.00	57.33	1129.74	664.98	20.439	290.00	77.96	1547.17	915.18	22.124
211.00	57.59	1134.97	668.11	20.464	291.00	78.22	1552.39	918.30	22.142
212.00	57.85	1140.20	671.25	20.489	292.00	78.48	1557.60	921.43	22.160
213.00	58.11	1145.42	674.38	20.514	293.00	78.74	1562.81	924.55	22.177
214.00	58.37	1150.65	677.51	20.538	294.00	78.99	1568.02	927.67	22.195
215.00	58.63	1155.87	680.64	20.562	295.00	79.25	1573.23	930.80	22.213
216.00	58.88	1161.10	683.77	20.587	296.00	79.51	1578.44	933.92	22.230
217.00	59.14	1166.32	686.90	20.611	297.00	79.77	1583.65	937.05	22.248
218.00	59.40	1171.55	690.03	20.635	298.00	80.02	1588.86	940.17	22.266
219.00	59.66	1176.77	693.16	20.659	299.00	80.28	1594.07	943.29	22.283
220.00	59.92	1181.99	696.29	20.682	300.00	80.54	1599.28	946.42	22.300

90.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
4.00	4.87	53.64	9.25	1.798
5.00	4.93	55.56	10.59	2.247
6.00	5.01	57.74	12.09	2.639
7.00	5.09	60.05	13.64	3.001
8.00	5.19	62.86	15.58	3.374
9.00	5.29	66.31	18.05	3.780
10.00	5.41	70.18	20.86	4.187
11.00	5.53	74.36	23.88	4.585
12.00	5.67	78.76	27.05	4.968
13.00	5.81	83.33	30.31	5.334
14.00	5.97	88.04	33.64	5.683
15.00	6.12	92.87	37.01	6.016
16.00	6.29	97.80	40.42	6.334
17.00	6.47	102.82	43.86	6.639
18.00	6.65	107.92	47.31	6.930
19.00	6.83	113.09	50.77	7.210
20.00	7.03	118.33	54.25	7.478
21.00	7.23	123.63	57.73	7.737
22.00	7.43	128.98	61.21	7.986
23.00	7.64	134.38	64.70	8.226
24.00	7.85	139.82	68.19	8.457
25.00	8.07	145.29	71.68	8.681
26.00	8.29	150.79	75.17	8.896
27.00	8.52	156.32	78.65	9.105
28.00	8.74	161.87	82.12	9.307
29.00	8.97	167.43	85.59	9.502
30.00	9.21	173.01	89.06	9.691
31.00	9.44	178.60	92.51	9.874
32.00	9.68	184.19	95.96	10.052
33.00	9.91	189.79	99.40	10.224
34.00	10.15	195.39	102.83	10.391
35.00	10.39	200.99	106.25	10.554
36.00	10.63	206.58	109.67	10.711
37.00	10.87	212.18	113.07	10.865
38.00	11.11	217.77	116.47	11.014
39.00	11.35	223.36	119.86	11.159
40.00	11.59	228.94	123.24	11.300
41.00	11.83	234.52	126.62	11.438
42.00	12.07	240.09	129.98	11.572
43.00	12.32	245.65	133.34	11.703
44.00	12.56	251.21	136.69	11.831
45.00	12.80	256.76	140.04	11.955
46.00	13.04	262.30	143.37	12.077
47.00	13.28	267.84	146.71	12.196
48.00	13.52	273.37	150.03	12.313
49.00	13.77	278.89	153.35	12.427
50.00	14.01	284.41	156.66	12.538
51.00	14.25	289.91	159.97	12.647
52.00	14.49	295.42	163.27	12.754
53.00	14.73	300.91	166.57	12.859
54.00	14.97	306.40	169.87	12.961
55.00	15.21	311.89	173.15	13.062
56.00	15.45	317.37	176.44	13.161
57.00	15.69	322.84	179.72	13.258
58.00	15.93	328.30	182.99	13.353
59.00	16.17	333.76	186.26	13.446
60.00	16.41	339.22	189.53	13.538
61.00	16.65	344.67	192.79	13.628
62.00	16.89	350.11	196.05	13.716
63.00	17.13	355.55	199.31	13.803
64.00	17.37	360.98	202.56	13.889
65.00	17.61	366.41	205.81	13.973
66.00	17.85	371.83	209.05	14.056
67.00	18.09	377.25	212.29	14.137
68.00	18.33	382.67	215.53	14.218
69.00	18.57	388.08	218.77	14.296
70.00	18.80	393.48	222.01	14.374
71.00	19.04	398.89	225.24	14.451
72.00	19.28	404.28	228.47	14.526
73.00	19.52	409.68	231.69	14.601
74.00	19.75	415.07	234.92	14.674
75.00	19.99	420.45	238.14	14.746
76.00	20.23	425.84	241.36	14.818
77.00	20.47	431.22	244.58	14.888
78.00	20.70	436.59	247.79	14.957
79.00	20.94	441.97	251.00	15.026
80.00	21.18	447.33	254.22	15.093
81.00	21.41	452.70	257.42	15.160
82.00	21.65	458.06	260.63	15.226
83.00	21.89	463.42	263.84	15.291
84.00	22.12	468.78	267.04	15.355
85.00	22.36	474.14	270.24	15.418
86.00	22.59	479.49	273.44	15.481
87.00	22.83	484.84	276.64	15.543
88.00	23.07	490.18	279.84	15.604
89.00	23.30	495.53	283.04	15.664
90.00	23.54	500.87	286.23	15.724
91.00	23.77	506.21	289.42	15.783
92.00	24.01	511.54	292.61	15.841
93.00	24.24	516.88	295.80	15.899
94.00	24.48	522.21	298.99	15.956
95.00	24.71	527.54	302.18	16.012
96.00	24.95	532.86	305.37	16.068
97.00	25.18	538.19	308.55	16.123
98.00	25.42	543.51	311.74	16.178
99.00	25.65	548.83	314.92	16.232
100.00	25.88	554.15	318.10	16.285
101.00	26.12	559.47	321.28	16.338
102.00	26.35	564.79	324.46	16.391
103.00	26.59	570.10	327.64	16.443
104.00	26.82	575.41	330.81	16.494
105.00	27.06	580.72	333.99	16.545
106.00	27.29	586.03	337.17	16.595
107.00	27.52	591.34	340.34	16.645
108.00	27.76	596.64	343.51	16.694
109.00	27.99	601.94	346.69	16.743
110.00	28.22	607.25	349.86	16.791
111.00	28.46	612.55	353.03	16.839
112.00	28.69	617.85	356.20	16.887
113.00	28.92	623.14	359.37	16.934
114.00	29.16	628.44	362.54	16.981
115.00	29.39	633.73	365.70	17.027
116.00	29.62	639.03	368.87	17.073
117.00	29.86	644.32	372.04	17.118
118.00	30.09	649.61	375.20	17.163
119.00	30.32	654.90	378.37	17.208
120.00	30.56	660.18	381.53	17.252
121.00	30.79	665.47	384.69	17.296
122.00	31.02	670.76	387.86	17.339
123.00	31.25	676.04	391.02	17.383
124.00	31.49	681.32	394.18	17.425
125.00	31.72	686.60	397.34	17.468
126.00	31.95	691.88	400.50	17.510
127.00	32.18	697.16	403.66	17.552
128.00	32.42	702.44	406.82	17.593
129.00	32.65	707.72	409.98	17.634
130.00	32.88	713.00	413.13	17.675
131.00	33.11	718.27	416.29	17.715
132.00	33.35	723.55	419.45	17.755
133.00	33.58	728.82	422.60	17.795
134.00	33.81	734.09	425.76	17.835
135.00	34.04	739.36	428.91	17.874
136.00	34.27	744.63	432.07	17.913
137.00	34.51	749.90	435.22	17.951
138.00	34.74	755.17	438.38	17.990
139.00	34.97	760.44	441.53	18.028
140.00	35.20	765.70	444.68	18.065

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	35.43	770.97	447.83	18.103	221.00	53.88	1190.37	699.01	20.460
142.00	35.67	776.24	450.98	18.140	222.00	54.11	1195.59	702.14	20.483
143.00	35.90	781.50	454.14	18.177	223.00	54.34	1200.82	705.28	20.507
144.00	36.13	786.76	457.29	18.214	224.00	54.57	1206.05	708.41	20.530
145.00	36.36	792.03	460.44	18.250	225.00	54.80	1211.27	711.54	20.553
146.00	36.59	797.29	463.59	18.286	226.00	55.03	1216.50	714.67	20.576
147.00	36.82	802.55	466.74	18.322	227.00	55.26	1221.72	717.80	20.599
148.00	37.06	807.81	469.88	18.358	228.00	55.49	1226.95	720.93	20.622
149.00	37.29	813.07	473.03	18.393	229.00	55.72	1232.17	724.06	20.645
150.00	37.52	818.33	476.18	18.428	230.00	55.95	1237.40	727.19	20.668
151.00	37.75	823.59	479.33	18.463	231.00	56.18	1242.62	730.32	20.691
152.00	37.98	828.84	482.48	18.498	232.00	56.41	1247.85	733.45	20.713
153.00	38.21	834.10	485.62	18.533	233.00	56.64	1253.07	736.58	20.736
154.00	38.44	839.36	488.77	18.567	234.00	56.86	1258.29	739.71	20.758
155.00	38.67	844.61	491.92	18.601	235.00	57.09	1263.52	742.84	20.780
156.00	38.91	849.87	495.06	18.635	236.00	57.32	1268.74	745.97	20.803
157.00	39.14	855.12	498.21	18.668	237.00	57.55	1273.96	749.10	20.825
158.00	39.37	860.37	501.35	18.702	238.00	57.78	1279.19	752.23	20.847
159.00	39.60	865.63	504.50	18.735	239.00	58.01	1284.41	755.36	20.869
160.00	39.83	870.88	507.64	18.768	240.00	58.24	1289.63	758.49	20.890
161.00	40.06	876.13	510.79	18.800	241.00	58.47	1294.85	761.62	20.912
162.00	40.29	881.38	513.93	18.833	242.00	58.70	1300.07	764.75	20.934
163.00	40.52	886.63	517.08	18.865	243.00	58.93	1305.30	767.88	20.955
164.00	40.75	891.88	520.22	18.897	244.00	59.16	1310.52	771.01	20.977
165.00	40.99	897.13	523.36	18.929	245.00	59.39	1315.74	774.14	20.998
166.00	41.22	902.38	526.51	18.961	246.00	59.62	1320.96	777.27	21.019
167.00	41.45	907.63	529.65	18.992	247.00	59.85	1326.18	780.40	21.041
168.00	41.68	912.87	532.79	19.024	248.00	60.08	1331.40	783.52	21.062
169.00	41.91	918.12	535.93	19.055	249.00	60.31	1336.62	786.65	21.083
170.00	42.14	923.37	539.07	19.086	250.00	60.54	1341.84	789.78	21.104
171.00	42.37	928.61	542.22	19.117	251.00	60.77	1347.06	792.91	21.124
172.00	42.60	933.86	545.36	19.147	252.00	60.99	1352.28	796.04	21.145
173.00	42.83	939.10	548.50	19.178	253.00	61.22	1357.50	799.17	21.166
174.00	43.06	944.35	551.64	19.208	254.00	61.45	1362.72	802.29	21.186
175.00	43.29	949.59	554.78	19.238	255.00	61.68	1367.94	805.42	21.207
176.00	43.52	954.83	557.92	19.268	256.00	61.91	1373.16	808.55	21.227
177.00	43.75	960.08	561.06	19.297	257.00	62.14	1378.38	811.68	21.248
178.00	43.98	965.32	564.20	19.327	258.00	62.37	1383.60	814.81	21.268
179.00	44.22	970.56	567.34	19.356	259.00	62.60	1388.81	817.93	21.288
180.00	44.45	975.80	570.48	19.386	260.00	62.83	1394.03	821.06	21.308
181.00	44.68	981.04	573.62	19.415	261.00	63.06	1399.25	824.19	21.328
182.00	44.91	986.28	576.75	19.443	262.00	63.29	1404.47	827.31	21.348
183.00	45.14	991.52	579.89	19.472	263.00	63.52	1409.69	830.44	21.368
184.00	45.37	996.76	583.03	19.501	264.00	63.75	1414.90	833.57	21.388
185.00	45.60	1002.00	586.17	19.529	265.00	63.98	1420.12	836.70	21.408
186.00	45.83	1007.24	589.31	19.557	266.00	64.20	1425.34	839.82	21.427
187.00	46.06	1012.48	592.44	19.585	267.00	64.43	1430.56	842.95	21.447
188.00	46.29	1017.72	595.58	19.613	268.00	64.66	1435.77	846.08	21.466
189.00	46.52	1022.95	598.72	19.641	269.00	64.89	1440.99	849.20	21.486
190.00	46.75	1028.19	601.86	19.669	270.00	65.12	1446.21	852.33	21.505
191.00	46.98	1033.43	604.99	19.696	271.00	65.35	1451.42	855.46	21.524
192.00	47.21	1038.66	608.13	19.724	272.00	65.58	1456.64	858.58	21.544
193.00	47.44	1043.90	611.27	19.751	273.00	65.81	1461.86	861.71	21.563
194.00	47.67	1049.14	614.40	19.778	274.00	66.04	1467.07	864.84	21.582
195.00	47.90	1054.37	617.54	19.805	275.00	66.27	1472.29	867.96	21.601
196.00	48.13	1059.61	620.67	19.832	276.00	66.50	1477.50	871.09	21.620
197.00	48.36	1064.84	623.81	19.858	277.00	66.73	1482.72	874.22	21.639
198.00	48.59	1070.07	626.94	19.885	278.00	66.95	1487.93	877.34	21.657
199.00	48.82	1075.31	630.08	19.911	279.00	67.18	1493.15	880.47	21.676
200.00	49.05	1080.54	633.21	19.937	280.00	67.41	1498.37	883.59	21.695
201.00	49.28	1085.77	636.35	19.963	281.00	67.64	1503.58	886.72	21.713
202.00	49.51	1091.01	639.48	19.989	282.00	67.87	1508.80	889.84	21.732
203.00	49.74	1096.24	642.62	20.015	283.00	68.10	1514.01	892.97	21.750
204.00	49.97	1101.47	645.75	20.041	284.00	68.33	1519.22	896.10	21.769
205.00	50.20	1106.70	648.89	20.067	285.00	68.56	1524.44	899.22	21.787
206.00	50.43	1111.93	652.02	20.092	286.00	68.79	1529.65	902.35	21.805
207.00	50.66	1117.16	655.15	20.117	287.00	69.02	1534.87	905.47	21.824
208.00	50.89	1122.40	658.29	20.143	288.00	69.25	1540.08	908.60	21.842
209.00	51.12	1127.63	661.42	20.168	289.00	69.47	1545.30	911.72	21.860
210.00	51.35	1132.86	664.56	20.193	290.00	69.70	1550.51	914.85	21.878
211.00	51.58	1138.09	667.69	20.217	291.00	69.93	1555.72	917.97	21.896
212.00	51.81	1143.31	670.82	20.242	292.00	70.16	1560.94	921.10	21.914
213.00	52.04	1148.54	673.95	20.267	293.00	70.39	1566.15	924.22	21.931
214.00	52.27	1153.77	677.09	20.291	294.00	70.62	1571.36	927.35	21.949
215.00	52.50	1159.00	680.22	20.316	295.00	70.85	1576.58	930.47	21.967
216.00	52.73	1164.23	683.35	20.340	296.00	71.08	1581.79	933.60	21.985
217.00	52.96	1169.46	686.48	20.364	297.00	71.31	1587.00	936.72	22.002
218.00	53.19	1174.69	689.62	20.388	298.00	71.54	1592.21	939.85	22.020
219.00	53.42	1179.91	692.75	20.412	299.00	71.76	1597.43	942.97	22.037
220.00	53.65	1185.14	695.88	20.436	300.00	71.99	1602.64	946.10	22.055

100.00 ATMOSPHERE ISOBAR

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
4.00	4.78	58.29	9.83	1.737
5.00	4.84	60.18	11.12	2.181
6.00	4.91	62.30	12.56	2.564
7.00	4.99	64.55	14.04	2.914
8.00	5.07	67.28	15.90	3.277
9.00	5.17	70.64	18.29	3.673
10.00	5.27	74.43	21.02	4.071
11.00	5.38	78.51	23.97	4.460
12.00	5.50	82.82	27.06	4.835
13.00	5.63	87.29	30.25	5.193
14.00	5.76	91.91	33.51	5.535
15.00	5.90	96.64	36.81	5.861
16.00	6.05	101.46	40.15	6.173
17.00	6.20	106.38	43.52	6.470
18.00	6.36	111.37	46.91	6.756
19.00	6.53	116.43	50.31	7.029
20.00	6.69	121.56	53.73	7.293
21.00	6.87	126.75	57.16	7.546
22.00	7.05	132.00	60.60	7.790
23.00	7.23	137.29	64.04	8.025
24.00	7.42	142.63	67.48	8.253
25.00	7.61	148.02	70.93	8.472
26.00	7.80	153.43	74.38	8.685
27.00	8.00	158.88	77.83	8.890
28.00	8.20	164.36	81.28	9.089
29.00	8.40	169.86	84.72	9.282
30.00	8.61	175.37	88.16	9.469
31.00	8.81	180.90	91.60	9.651
32.00	9.02	186.45	95.03	9.827
33.00	9.23	192.00	98.45	9.998
34.00	9.44	197.56	101.87	10.164
35.00	9.66	203.13	105.29	10.325
36.00	9.87	208.70	108.69	10.482
37.00	10.08	214.27	112.09	10.635
38.00	10.30	219.84	115.49	10.783
39.00	10.51	225.41	118.87	10.928
40.00	10.73	230.98	122.25	11.069
41.00	10.95	236.54	125.63	11.206
42.00	11.16	242.10	128.99	11.340
43.00	11.38	247.66	132.35	11.471
44.00	11.60	253.21	135.71	11.599
45.00	11.81	258.76	139.05	11.723
46.00	12.03	264.30	142.39	11.845
47.00	12.25	269.84	145.73	11.964
48.00	12.47	275.37	149.06	12.081
49.00	12.68	280.90	152.38	12.195
50.00	12.90	286.42	155.70	12.306
51.00	13.12	291.93	159.01	12.415
52.00	13.33	297.44	162.32	12.522
53.00	13.55	302.94	165.62	12.627
54.00	13.77	308.44	168.92	12.730
55.00	13.99	313.93	172.22	12.831
56.00	14.20	319.42	175.51	12.929
57.00	14.42	324.90	178.79	13.026
58.00	14.64	330.37	182.07	13.122
59.00	14.85	335.84	185.35	13.215
60.00	15.07	341.31	188.62	13.307
61.00	15.28	346.76	191.89	13.397
62.00	15.50	352.22	195.15	13.486
63.00	15.72	357.67	198.42	13.573
64.00	15.93	363.11	201.67	13.659
65.00	16.15	368.55	204.93	13.743
66.00	16.36	373.98	208.18	13.826
67.00	16.58	379.41	211.43	13.908
68.00	16.79	384.84	214.67	13.988
69.00	17.01	390.26	217.92	14.067
70.00	17.22	395.68	221.16	14.145
71.00	17.44	401.09	224.40	14.222
72.00	17.65	406.50	227.63	14.298
73.00	17.87	411.90	230.86	14.372
74.00	18.08	417.30	234.09	14.446
75.00	18.30	422.70	237.32	14.518
76.00	18.51	428.10	240.54	14.590
77.00	18.72	433.49	243.77	14.660
78.00	18.94	438.87	246.99	14.730
79.00	19.15	444.26	250.21	14.798
80.00	19.36	449.64	253.42	14.866
81.00	19.58	455.01	256.64	14.933
82.00	19.79	460.39	259.85	14.999
83.00	20.00	465.76	263.06	15.064
84.00	20.22	471.12	266.27	15.128
85.00	20.43	476.49	269.48	15.191
86.00	20.64	481.85	272.68	15.254
87.00	20.86	487.21	275.89	15.316
88.00	21.07	492.56	279.09	15.377
89.00	21.28	497.92	282.29	15.438
90.00	21.49	503.27	285.49	15.498
91.00	21.70	508.62	288.69	15.557
92.00	21.92	513.96	291.88	15.615
93.00	22.13	519.31	295.08	15.673
94.00	22.34	524.65	298.27	15.730
95.00	22.55	529.99	301.46	15.786
96.00	22.76	535.32	304.65	15.842
97.00	22.98	540.66	307.84	15.898
98.00	23.19	545.99	311.03	15.952
99.00	23.40	551.32	314.22	16.006
100.00	23.61	556.65	317.40	16.060
101.00	23.82	561.97	320.59	16.113
102.00	24.03	567.30	323.77	16.165
103.00	24.24	572.62	326.95	16.217
104.00	24.46	577.94	330.13	16.269
105.00	24.67	583.26	333.31	16.320
106.00	24.88	588.58	336.49	16.370
107.00	25.09	593.89	339.67	16.420
108.00	25.30	599.20	342.85	16.469
109.00	25.51	604.51	346.03	16.518
110.00	25.72	609.82	349.20	16.567
111.00	25.93	615.13	352.38	16.615
112.00	26.14	620.44	355.55	16.662
113.00	26.35	625.74	358.72	16.710
114.00	26.56	631.05	361.89	16.756
115.00	26.77	636.35	365.07	16.803
116.00	26.98	641.65	368.24	16.849
117.00	27.19	646.95	371.41	16.894
118.00	27.40	652.25	374.57	16.939
119.00	27.61	657.54	377.74	16.984
120.00	27.82	662.84	380.91	17.028
121.00	28.03	668.13	384.08	17.072
122.00	28.24	673.43	387.24	17.116
123.00	28.45	678.72	390.41	17.159
124.00	28.66	684.01	393.57	17.202
125.00	28.87	689.30	396.74	17.244
126.00	29.08	694.58	399.90	17.286
127.00	29.29	699.87	403.06	17.328
128.00	29.50	705.15	406.22	17.369
129.00	29.71	710.44	409.38	17.411
130.00	29.92	715.72	412.54	17.451
131.00	30.13	721.00	415.70	17.492
132.00	30.34	726.28	418.86	17.532
133.00	30.55	731.56	422.02	17.572
134.00	30.76	736.84	425.18	17.611
135.00	30.97	742.12	428.34	17.651
136.00	31.18	747.40	431.50	17.690
137.00	31.39	752.67	434.65	17.728
138.00	31.59	757.95	437.81	17.767
139.00	31.80	763.22	440.97	17.805
140.00	32.01	768.49	444.12	17.843

TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)	TEMPERATURE (K)	SPECIFIC VOLUME (CC/GM)	ENTHALPY (J/GM)	INTERNAL ENERGY (J/GM)	ENTROPY (J/GM-K)
141.00	32.22	773.77	447.28	17.880	221.00	48.84	1193.52	698.61	20.239
142.00	32.43	779.04	450.43	17.917	222.00	49.05	1198.75	701.75	20.262
143.00	32.64	784.31	453.58	17.954	223.00	49.26	1203.98	704.88	20.286
144.00	32.85	789.58	456.74	17.991	224.00	49.46	1209.21	708.01	20.309
145.00	33.06	794.84	459.89	18.027	225.00	49.67	1214.43	711.14	20.332
146.00	33.27	800.11	463.04	18.064	226.00	49.88	1219.66	714.28	20.356
147.00	33.47	805.38	466.19	18.100	227.00	50.08	1224.89	717.41	20.379
148.00	33.68	810.65	469.35	18.135	228.00	50.29	1230.12	720.54	20.402
149.00	33.89	815.91	472.50	18.171	229.00	50.50	1235.35	723.67	20.425
150.00	34.10	821.17	475.65	18.206	230.00	50.70	1240.58	726.81	20.447
151.00	34.31	826.44	478.80	18.241	231.00	50.91	1245.80	729.94	20.470
152.00	34.52	831.70	481.95	18.276	232.00	51.12	1251.03	733.07	20.493
153.00	34.73	836.96	485.10	18.310	233.00	51.32	1256.26	736.20	20.515
154.00	34.93	842.22	488.25	18.344	234.00	51.53	1261.48	739.33	20.538
155.00	35.14	847.49	491.40	18.379	235.00	51.74	1266.71	742.46	20.560
156.00	35.35	852.75	494.54	18.412	236.00	51.94	1271.94	745.59	20.582
157.00	35.56	858.00	497.69	18.446	237.00	52.15	1277.16	748.73	20.604
158.00	35.77	863.26	500.84	18.479	238.00	52.36	1282.39	751.86	20.626
159.00	35.98	868.52	503.99	18.513	239.00	52.56	1287.61	754.99	20.648
160.00	36.18	873.78	507.13	18.545	240.00	52.77	1292.84	758.12	20.670
161.00	36.39	879.03	510.28	18.578	241.00	52.98	1298.06	761.25	20.692
162.00	36.60	884.29	513.43	18.611	242.00	53.18	1303.29	764.38	20.713
163.00	36.81	889.55	516.57	18.643	243.00	53.39	1308.51	767.51	20.735
164.00	37.02	894.80	519.72	18.675	244.00	53.60	1313.74	770.64	20.756
165.00	37.22	900.05	522.86	18.707	245.00	53.80	1318.96	773.77	20.778
166.00	37.43	905.31	526.01	18.739	246.00	54.01	1324.18	776.90	20.799
167.00	37.64	910.56	529.15	18.770	247.00	54.22	1329.41	780.03	20.820
168.00	37.85	915.81	532.30	18.802	248.00	54.42	1334.63	783.16	20.841
169.00	38.06	921.06	535.44	18.833	249.00	54.63	1339.85	786.29	20.862
170.00	38.26	926.32	538.59	18.864	250.00	54.84	1345.08	789.42	20.883
171.00	38.47	931.57	541.73	18.895	251.00	55.04	1350.30	792.55	20.904
172.00	38.68	936.82	544.87	18.925	252.00	55.25	1355.52	795.68	20.925
173.00	38.89	942.07	548.02	18.956	253.00	55.46	1360.74	798.81	20.945
174.00	39.10	947.31	551.16	18.986	254.00	55.66	1365.97	801.94	20.966
175.00	39.30	952.56	554.30	19.016	255.00	55.87	1371.19	805.06	20.986
176.00	39.51	957.81	557.44	19.046	256.00	56.08	1376.41	808.19	21.007
177.00	39.72	963.06	560.59	19.076	257.00	56.28	1381.63	811.32	21.027
178.00	39.93	968.30	563.73	19.105	258.00	56.49	1386.85	814.45	21.048
179.00	40.14	973.55	566.87	19.135	259.00	56.70	1392.07	817.58	21.068
180.00	40.34	978.80	570.01	19.164	260.00	56.90	1397.29	820.71	21.088
181.00	40.55	984.04	573.15	19.193	261.00	57.11	1402.51	823.84	21.108
182.00	40.76	989.29	576.29	19.222	262.00	57.32	1407.74	826.97	21.128
183.00	40.97	994.53	579.43	19.251	263.00	57.52	1412.96	830.09	21.148
184.00	41.17	999.77	582.57	19.279	264.00	57.73	1418.18	833.22	21.168
185.00	41.38	1005.02	585.71	19.308	265.00	57.94	1423.40	836.35	21.187
186.00	41.59	1010.26	588.85	19.336	266.00	58.14	1428.62	839.48	21.207
187.00	41.80	1015.50	591.99	19.364	267.00	58.35	1433.84	842.61	21.227
188.00	42.00	1020.75	595.13	19.392	268.00	58.55	1439.05	845.73	21.246
189.00	42.21	1025.99	598.27	19.420	269.00	58.76	1444.27	848.86	21.266
190.00	42.42	1031.23	601.41	19.447	270.00	58.97	1449.49	851.99	21.285
191.00	42.63	1036.47	604.55	19.475	271.00	59.17	1454.71	855.12	21.304
192.00	42.83	1041.71	607.68	19.502	272.00	59.38	1459.93	858.25	21.323
193.00	43.04	1046.95	610.82	19.530	273.00	59.59	1465.15	861.37	21.343
194.00	43.25	1052.19	613.96	19.557	274.00	59.79	1470.37	864.50	21.362
195.00	43.46	1057.43	617.10	19.584	275.00	60.00	1475.59	867.63	21.381
196.00	43.66	1062.67	620.24	19.610	276.00	60.21	1480.80	870.75	21.400
197.00	43.87	1067.90	623.37	19.637	277.00	60.41	1486.02	873.88	21.418
198.00	44.08	1073.14	626.51	19.664	278.00	60.62	1491.24	877.01	21.437
199.00	44.29	1078.38	629.65	19.690	279.00	60.82	1496.46	880.14	21.456
200.00	44.49	1083.62	632.78	19.716	280.00	61.03	1501.67	883.26	21.475
201.00	44.70	1088.85	635.92	19.742	281.00	61.24	1506.89	886.39	21.493
202.00	44.91	1094.09	639.06	19.768	282.00	61.44	1512.11	889.52	21.512
203.00	45.11	1099.33	642.19	19.794	283.00	61.65	1517.33	892.64	21.530
204.00	45.32	1104.56	645.33	19.820	284.00	61.86	1522.54	895.77	21.549
205.00	45.53	1109.80	648.46	19.845	285.00	62.06	1527.76	898.90	21.567
206.00	45.74	1115.03	651.60	19.871	286.00	62.27	1532.98	902.02	21.585
207.00	45.94	1120.27	654.73	19.896	287.00	62.47	1538.19	905.15	21.603
208.00	46.15	1125.50	657.87	19.921	288.00	62.68	1543.41	908.28	21.622
209.00	46.36	1130.73	661.00	19.947	289.00	62.89	1548.62	911.40	21.640
210.00	46.56	1135.97	664.14	19.972	290.00	63.09	1553.84	914.53	21.658
211.00	46.77	1141.20	667.27	19.996	291.00	63.30	1559.06	917.65	21.676
212.00	46.98	1146.43	670.41	20.021	292.00	63.51	1564.27	920.78	21.694
213.00	47.19	1151.67	673.54	20.046	293.00	63.71	1569.49	923.91	21.711
214.00	47.39	1156.90	676.68	20.070	294.00	63.92	1574.70	927.03	21.729
215.00	47.60	1162.13	679.81	20.095	295.00	64.12	1579.92	930.16	21.747
216.00	47.81	1167.36	682.95	20.119	296.00	64.33	1585.13	933.28	21.765
217.00	48.01	1172.59	686.08	20.143	297.00	64.54	1590.35	936.41	21.782
218.00	48.22	1177.83	689.21	20.167	298.00	64.74	1595.56	939.53	21.800
219.00	48.43	1183.06	692.35	20.191	299.00	64.95	1600.78	942.66	21.817
220.00	48.63	1188.29	695.48	20.215	300.00	65.16	1605.99	945.79	21.835

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U. S. DEPARTMENT OF COMMERCE
Luther H. Hodges, *Secretary*

NATIONAL BUREAU OF STANDARDS
A. V. Astin, *Director*

THE NATIONAL BUREAU OF STANDARDS

The scope of activities of the National Bureau of Standards at its major laboratories in Washington, D.C., and Boulder, Colorado, is suggested in the following listing of the divisions and sections engaged in technical work. In general, each section carries out specialized research, development, and engineering in the field indicated by its title. A brief description of the activities, and of the resultant publications, appears on the inside of the front cover.

WASHINGTON, D. C.

Electricity. Resistance and Reactance. Electrochemistry. Electrical Instruments. Magnetic Measurements. Dielectrics. High Voltage.

Metrology. Photometry and Colorimetry. Refractometry. Photographic Research. Length. Engineering Metrology. Mass and Scale. Volumetry and Densimetry.

Heat. Temperature Physics. Heat Measurements. Cryogenic Physics. Equation of State. Statistical Physics.

Radiation Physics. X-ray. Radioactivity. Radiation Theory. High Energy Radiation. Radiological Equipment. Nucleonic Instrumentation. Neutron Physics.

Analytical and Inorganic Chemistry. Pure Substances. Spectrochemistry. Solution Chemistry. Standard Reference Materials. Applied Analytical Research. Crystal Chemistry.

Mechanics. Sound. Pressure and Vacuum. Fluid Mechanics. Engineering Mechanics. Rheology. Combustion Controls.

Polymers. Macromolecules: Synthesis and Structure. Polymer Chemistry. Polymer Physics. Polymer Characterization. Polymer Evaluation and Testing. Applied Polymer Standards and Research. Dental Research.

Metallurgy. Engineering Metallurgy. Microscopy and Diffraction. Metal Reactions. Metal Physics. Electrolysis and Metal Deposition.

Inorganic Solids. Engineering Ceramics. Glass. Solid State Chemistry. Crystal Growth. Physical Properties. Crystallography.

Building Research. Structural Engineering. Fire Research. Mechanical Systems. Organic Building Materials. Codes and Safety Standards. Heat Transfer. Inorganic Building Materials. Metallic Building Materials.

Applied Mathematics. Numerical Analysis. Computation. Statistical Engineering. Mathematical Physics. Operations Research.

Data Processing Systems. Components and Techniques. Computer Technology. Measurements Automation. Engineering Applications. Systems Analysis.

Atomic Physics. Spectroscopy. Infrared Spectroscopy. Solid State Physics. Electron Physics. Atomic Physics.

Instrumentation. Engineering Electronics. Electron Devices. Electronic Instrumentation. Mechanical Instruments. Basic Instrumentation.

Physical Chemistry. Thermochemistry. Surface Chemistry. Organic Chemistry. Molecular Spectroscopy. Molecular Kinetics. Mass Spectrometry.

Office of Weights and Measures.

BOULDER, COLO.

Cryogenic Engineering Laboratory. Cryogenic Equipment. Cryogenic Processes. Properties of Materials. Cryogenic Technical Services.

CENTRAL RADIO PROPAGATION LABORATORY

Ionosphere Research and Propagation. Low Frequency and Very Low Frequency Research. Ionosphere Research. Prediction Services. Sun-Earth Relationships. Field Engineering. Radio Warning Services. Vertical Soundings Research.

Radio Propagation Engineering. Data Reduction Instrumentation. Radio Noise. Tropospheric Measurements. Tropospheric Analysis. Propagation-Terrain Effects. Radio-Meteorology. Lower Atmosphere Physics.

Radio Systems. Applied Electromagnetic Theory. High Frequency and Very High Frequency Research. Modulation Research. Antenna Research. Navigation Systems.

Upper Atmosphere and Space Physics. Upper Atmosphere and Plasma Physics. Ionosphere and Exosphere Scatter. Airglow and Aurora. Ionospheric Radio Astronomy.

RADIO STANDARDS LABORATORY

Radio Physics. Radio Broadcast Service. Radio and Microwave Materials. Atomic Frequency and Time-Interval Standards. Millimeter-Wave Research.

Circuit Standards. High Frequency Electrical Standards. Microwave Circuit Standards. Electronic Calibration Center.

NBS